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ABSTRACT

Eight lessons on integrated global economics provide detailed instructional materials on world food and energy systems, international cartels, and the nature and process of foreign investments. The materials are designed to help high school social studies teachers develop student understanding of key economic systems and activities and reinforce basic economic concepts through analysis and concept application. Each lesson contains the following components: duration, purpose, objectives, background information for teachers, materials, vocabulary, and instructional strategies to open, develop, and conclude the lesson. Supporting essays, maps, and discussion guidelines are additional components of most of the units. The lessons include: "American Agriculture and the Global Food System"; "Food and the Global Division of Labor"; "Economic Actors: Who's Who in the Global Food System"; "The Age of Oil and the Growth of the Global Petroleum Industry"; "The Economic Impact of OPEC Decisions"; "Dependence in the Global Economy: Natural Resources and International Cartels"; "Why Business Firms Invest Abroad: Three Views"; and "Investing Abroad: A Simulation of Negotiations between Multinational Corporations and Governments." (TRS)

BRINGING A GLOBAL PERSPECTIVE TO ECONOMICS

FIELD TEST EDITION

Bringing a Global Perspective Series

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with
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CONSORTIUM FOR INTERNATIONAL STUDIES EDUCATION

BRINGING A GLOBAL PERSPECTIVE SERIES

ROBERT B. WOYACH
Series Editor

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Bringing a Global Perspective to American Government
Bringing a Global Perspective to American History
Bringing a Global Perspective to Economics
Bringing a Global Perspective to World Geography
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ABOUT THE *BRINGING A GLOBAL PERSPECTIVE* SERIES

This set of supplementary classroom materials is part of the Bringing a Global Perspective Series. The purpose of this book, and other volumes in the series, is to provide instructional materials and strategies which teachers of high school social studies can use to enrich their curriculum.

The Origins of the Materials

During the fall and winter of 1981/82, fifteen Central Ohio high school teachers met weekly at The Ohio State University's Mershon Center. Under the direction of Dr. Robert Woyach, of the Mershon Center, and Dr. James Harf, of the Consortium for International Studies Education, which is headquartered at the Mershon Center, these teachers reviewed instructional materials originally developed for use in introductory college classes. Some of these materials, or learning packages, dealt with such issues as food, energy, terrorism, human rights, the environment and population. Others focused on the international community, such as the law of the sea, international boundaries, and foreign investment.

From these college materials, the teachers identified and then adapted readings and instructional activities which in their opinion could be useful within their own high school courses. Their criteria were purposefully broad so that the resulting materials would provide a flexible and valuable resource for high school teachers in varied classroom situations.

Bringing a Global Perspective to Basic Courses

The basic criterion for the teachers was that the materials be useful for bringing a "global perspective" to such courses as American government and history, economics, world geography and world history. Just what "bringing a global perspective" involves can vary considerably. A lesson in American history, for example, uses a central concept in global perspectives education, ethnocentrism, to show students how we can be ethnocentric with respect to people living in the past. Another lesson shows students their global heritage both in terms of the ethnic origins of their community and the global origins of many practices and ideas we take for granted in every-day life.

In economics a lesson focuses on the division of labor, a concept typically associated with the domestic economy. The concept is reinforced as students see how it applies to the international economy as well. In addition the lesson raises questions about security and equity, issues which are often more difficult to introduce within the domestic context.

In world geography and history, lessons introduce a "global" perspective by providing materials which stress interactions among regions. Others introduce new perceptual maps of the world, such as the Atlantic Basin, to break down mental barriers to perceiving the world in new ways. They introduce and reinforce such concepts as national boundaries. They show students environmental and social systems that make up our world.

Instructional Variety

The materials also enrich basic courses by providing resources for introducing greater instructional variety. Some of the lessons include student readings and materials for use by the instructor in designing classroom lectures. But most lessons also include a variety of other instructional techniques. These include simulations, small group work, decision-making exercises, charting and map-making activities, analysis of statistical data as well as map reading. Students work in large groups, small groups and individually. They do research, prepare position papers and present the results of their discussions and research in class.

Practical and Flexible Formats

The lessons are also designed to be self-contained. Supplementary materials needed to conduct the lessons are appended in easily reproducible form. Clear statements of purpose and objectives provide an orientation toward the goals of the lesson and suggest an agenda for testing. A section on Background Information for Teachers provides ideas as to where the lesson might fit within the course as well as substantive information of use in presenting the lesson in class. A tested step-by-step format gives the instructor a clear and concise image of how the lesson might be conducted. By breaking the lesson down into discrete steps, it also provides greater flexibility for experimenting and adapting the lesson to one's own style and situation.

Other Books in This Series

The *Bringing a Global Perspective* Series includes the following volumes:

Bringing a Global Perspective to American Government
Bringing a Global Perspective to American History
Bringing a Global Perspective to Economics
Bringing a Global Perspective to World Geography
Bringing a Global Perspective to World History

The lessons in these volumes have been edited and reviewed by curriculum consultants and teachers in the field. The purpose of this edition is to disseminate these materials and to obtain further reactions from teachers who have used them.

ACKNOWLEDGEMENTS

The effort and expertise of a great many people have gone into the shaping of the lessons in this volume. The Central Ohio high school teachers who participated in the Curriculum Seminar and who identified and drafted lessons deserve much of the credit for what is useful herein. In particular this includes David Black, Larry Kleinhenz and David Wiget of the Columbus City Schools.

The efforts of these teachers also relied on the previous work of editors and curriculum writers/developers associated with the Consortium for International Studies Education (CISE). Most of the readings and many of the activities contained in this volume were suggested by or contained in the following CISE learning packages:

James Harf, Thomas Trout and Kenneth Dahlberg, editors. "Environment and the Global Arena." Global Issues Series.
James Harf, Thomas Trout and Raymond Hopkins, editors. "Food in the Global Arena." Global Issues Series.
James Harf, Thomas Trout and Barry Hughes, editors. "Energy in the Global Arena." Global Issues Series.
George Lopez. "Dependence and Interdependence in the International System."
Robert Miller and John Kilpatrick. "Private International Investment: An Exercise in Theory and Policy."

The entire *Bringing a Global Perspective* Series owes a debt to two others. Dr. James E. Harf helped direct the Curriculum Seminar in which the materials were developed. In the process Dr. Harf provided guidance as to the substance of the lessons and insights into instructional strategies. Dr. Richard C. Remy, also a co-director of the project, provided input on instructional strategies and is largely responsible for the creative format of the lessons themselves.

In addition to these individuals, the project has been aided by Edith Bivona, who provided secretarial assistance, and Peggy A. Robinson of the Mershon Center. Frank Schiraldi of the Ohio Department of Education and Louis Grigar of the Texas Education Agency have recruited teachers to test and review materials and have helped to develop strategies and workshops for disseminating them.

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BRINGING A GLOBAL PERSPECTIVE TO ECONOMICS:
KEY IDEAS FOR TEACHERS

Trying to teach secondary students about economics without reference to the world economy is akin to teaching students about American government without reference to the judiciary. While the American economy seems self-contained in many respects, in fact everything from the analysis of economic scarcity and the way prices are set to the economic choices of banks, manufacturers, consumers, labor organizations and government are all constrained and influenced by the world market.

For American business, and the American economy, the world market has loomed even larger in recent years. In 1980 American firms exported nearly $174 billion worth of manufactured goods and nearly $217 billion worth of goods overall. By some estimates, one job in nine in American manufacturing firms depended on exports. One job in six depended on international trade (imports and exports). The economy as a whole has become dependent on the world market for an increasingly long list of basic industrial raw materials, including bauxite (93%), chromium (90%), potash (66%), tin (81%), cobalt (90%), nickel (77%), manganese (98%) and zinc (62%).

Since World War II American corporations have become globalized in terms of investment strategies as well. In 1980 some 3,000 American corporations had foreign investments worth over $200 billion abroad. Total world-wide sales of these corporations reached $2 trillion. Investments by foreign corporations have also grown. Not only do such commonly known internationals as Nestle's and Shell ply their trade

within the U.S., foreign investors now have substantial shares in such "all-American" corporations as Baskin-Robbins and Standard Oil of Ohio.

The world economy has increasingly touched the daily lives of consumers and workers as well. A cursory survey of supermarket shelves or the local department store provides ample evidence of the economic importance of imports. Recurring news reports also show that integration into the global economy is both creating new opportunities and causing new dislocations in the form of plant closings and the adoption of new technologies.

Bringing a Global Perspective to Economics takes a selective approach to the task of integrating global economics into the standard economics curriculum. The lessons provide detailed materials on the global food and energy systems, on international cartels, and on the nature and process of foreign investment. The materials can help teachers to develop students' understanding of these key economic systems and activities while reinforcing basic economic concepts.

1. Analyzing Key Global Systems: While supermarkets and department stores provide superficial evidence of students' linkage to the global economy, Americans today need to understand more clearly both their stake in global economic systems and how those systems affect the lives of people worldwide. A lesson on "American Agriculture and the Global Food System" helps students to understand the role of the American farmer in the global food system. It shows students how the global food system emerged historically and how it has come to rely on North American grain surpluses. Finally, it shows students where in the world American grain goes and thus helps them to analyze for themselves the relationship between the grain trade and world hunger. A follow-up lesson entitled "Economic Actors" introduces students systematically to different types of economic actors in the global food system and, through a case study of Nigeria, shows how they affect domestic economies.

Similarly, a lesson on "The Age of Oil and the Growth of the Global Petroleum Industry" introduces students to the global oil system. It also gives students insights into how and why business firms look to the world market. Another lesson entitled "Investing Abroad" involves students in a simulation of negotiations between business firms and host governments. The exercise provides insight into the political and economic considerations which affect investment policies anywhere.

2. <u>Applying Basic Concepts to the World Economy</u>: Given the critical role of the global economy to Americans today, it is important that students, as economic actors and as citizens, be able to apply basic economic concepts to the international economy and global economic issues. A lesson on "Food and the Global Division of Labor" applies the division of labor concept to the global economy. It shows students how economic efficiencies are increased through perfectly free trade. It also shows how that same division of labor can increase food insecurity and even inequity in the absence of political arrangements to protect trading partners. Another lesson shows students "The Economic Impact of OPEC Decisions." It helps students understand the success of OPEC, and its more recent problems, in terms of supply and demand elasticities. A second lesson, "Dependence in the Global Economy," extends the analysis of cartels. It indicates why Third World governments support commodity cartels and why OPEC's success is unlikely to be copied by cartels in coffee, aluminum and other basic commodities.

These lessons provide teachers with concrete activities and images for helping students to understand the global economy. They simultaneously reinforce basic concepts in the course and help students to understand some key issues and forces that lay at the base of important economic trends and events in the world today.

ECONOMICS

AMERICAN AGRICULTURE AND THE GLOBAL FOOD SYSTEM

DURATION: Approximately two class periods.

PURPOSE: To indicate the role of American agriculture in world trade and the importance of grain exports to American farmers.

OBJECTIVES: Students will:

(1) Identify common agricultural products consumed by people in the United States and by people abroad, including those which enter world trade.

(2) Suggest economic and non-economic reasons for differing consumption habits around the world.

(3) Identify areas of the world which have food (grain) deficits and areas which have food (grain) surpluses and suggest reasons for these deficits and surpluses.

(4) Suggest economic and political reasons for the pattern of American trade in feedgrains, wheat and soybeans.

BACKGROUND INFORMATION FOR TEACHERS:

Any serious attempt to understand the economics of American agriculture today must include some attention to the global food system. American agriculture depends on the world market. While actual percentages vary from year to year, approximately thirty percent (30%) of all the feedgrains grown in the United States (principally corn, sorghum, oats, barley) finds its way into the world market. Two-thirds of the American wheat crop is routinely exported, as is around half of the soybean crop.

However, the world is not quite so dependent on American agriculture. While American grain exports play critical roles from place to place and from time to time, the bulk of the food consumed in the world is grown locally. American grain exports account for only around 7% of world grain production, even less of world food production.

The Importance of Grain to the Food System

Actually many agricultural items which are grown around the world, especially those which enter world trade, have little or no nutritional value (e.g., tea, coffee, sugar, cocoa or chocolate, tobacco). The importance of these crops primarily lies in the fact that they take labor and land but yield little or no real food. They are also frequently grown in countries and by people who have precarious food supplies.

Among the food products grown and traded internationally, grains are the most important. Cereals, including wheat, corn and rice make up the most basic staple in human diets around the world. They are also most important to world trade, because most other items either tend to be more perishable (e.g., vegetables and fruits) or more expensive relative to the nutrition provided (e.g., meat, nuts and dairy products), or both. So most of the food traded internationally is in the form of grain, despite the Central American bananas and Mexican tomatoes routinely consumed by Americans.

The Emergence of the Global Food System

Actually the international food system is of relatively recent vintage. As discussed in the attached reading "The History of the Global Food System," it was not until the Industrial Revolution that the technological basis for even national food systems was developed. It was only with subsequent advances in transportation that a world food system was feasible.

Even then, the global food system with which Americans have become accustomed has only emerged since World War II. Before that time the food system was far more balanced. Western Europe was the only net food importer in the world. Asia became a consistent food importing region only during the war and its aftermath. With rapidly increasing populations, it has continued to be a food importer ever since.

Other regions, including Africa, Latin America and Eastern Europe, have only recently become net food importers. In part this has been due to rising populations. But it also reflects two other factors: (1) changes in consumption patterns, with increased demand for meat and thus feedgrains in Eastern Europe, and (2) development efforts in Africa and Latin America which have neglected investment in agriculture. Increasing investment in export agriculture (e.g., tea, cocoa, sugar, rubber, etc.), which takes away acreage from domestic food production, has also played a part in some countries.

Student Learning

This lesson exposes students to empirical data which graphically show the shape of the world food system. Students see who exports food and who imports food. They develop hypotheses about why the different regions may grow more or less food than their people need. In so doing, they utilize basic economic concepts.

Students also view the world food system from the perspective of the American Farmer. They see not only where American grain is sold but the pattern of grain trade across three key items: feedgrains used to produce meat, soybeans used to supplement human diets directly, and what, the poor man's grain. Given data on prices, students observe how wealth affects who can best afford America's surplus capacity.

AMERICAN AGRICULTURE AND THE GLOBAL FOOD SYSTEM

MATERIALS: The reading "The History of the World Food System," and the tables "The Changing Pattern of World Grain Trade," and "American Grain Exports--1978."

VOCABULARY: Grain, feedgrains, soybeans, nutritional value, food deficit, food surplus, subsistence agriculture, per capita income, commercial trade, food aid.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: Introduce the lesson by having students, in groups of 2 or 3, quickly list ten (10) common agricultural products that Americans consume during a normal day. Stop when the first group has identified ten items.

Step 2: Then have the groups quickly list five (5) agricultural products which people in other countries consume more regularly than Americans. Again stop when the first group has identified five items.

Step 3: Poll the groups and write a representative list on the board under the headings "Americans Consume" and "People Abroad Consume."

Step 4: Discuss the lists with the class. Ask:

1. Which of the products have little or no nutritional value? In studying world hunger why might it be important to look at the production and consumption of such products?

2. Are there products in the lists which students know or think are traded internationally? Which ones? Do these products appear on both lists? We tend to think American farmers feed the world. Do Americans import food products?

3. How might you explain the differences between the two lists? Why do people in other countries have different diets than Americans? Is it purely culture and tastes? What role does economics play? Does economics help explain differences in diets among Americans?

DEVELOPING THE LESSON

Step 5: Describe to the class the history of the world food system. Emphasize that most, though not all, of the foodstuffs

traded internationally are grains and that only a small proportion of the food consumed by people around the world comes from other countries.

You may want to reproduce copies of the reading "The History of the World Food System" for the class.

Step 6: Project the data on "The Changing Pattern of World Grain Trade." Have students:

1. Identify the region witn the greatest grain deficit.
2. Identify the region with the greatest grain surplus.
3. Suggest reasons why Asia has the greatest deficits.
4. Suggest reasons why European deficits have decreased since 1920.
5. Suggest reasons why African and Latin American deficits are relatively low, and relatively recent.

DAY 2: CONCLUDING THE LESSON

Step 7: Briefly remind students of the pattern and history of world grain trade. Note again in particular the dominant role of North America in the world grain trade, the importance of exports to American agriculture and the limited role of trade in the overall global food picture.

Step 8: Hand out copies of the table "American Grain Exports--1978." Then project a transparency or hand out copies of the "Discussion Questions."

Have students, working in groups of 2 or 3, answer these questions on the basis of information in the table.

Step 9: Discuss the questions with the class.

THE HISTORY OF THE WORLD FOOD SYSTEM

Food has always been a central factor in societies throughout the world. Only recently, however, has the world's food supply become part of a single world-wide "system." New capability in transportation and farming techniques have helped to create a global dimension to the producing and consuming of food.

From Subsistence Agriculture to a Global Market

For most of the two million years that humans have existed, securing food was everyone's full-time occupation. The tilling of the soil introduced a major advance in mankind's food supply. It created a division of labor that was enhanced by subsequent developments in irrigation and the use of animals for plowing. Still, these discoveries did not create a "world food system." Most of the world's food was consumed in the same place it was produced and by the same people that produced it. Some trade did occur. Imperial Rome relied on grain from North Africa. Exotic foods and spices travelled long routes to distant markets. Still, until just a little over two hundred years ago, most of the world's peoples supplied their own food from the yields of their own land.

The Industrial Revolution led to the end of subsistence agriculture. This "revolution" made possible the emergence of national food systems, and later a world-wide food system. Industrialization was actively triggered, in part, by the increased efficiency of agriculture and the resulting migration of now unneeded rural laborers into urban trades and crafts.

Not until the development of the railroad and the steam engine, partway through the nineteenth century, however, did the world's food system become truly international. The industrial regions of northern Europe could not make use of cheap and abundant supplies of grain, imported from Russia and from America. By the 1870's, grain from the heartland of America was travelling thousands of miles by rail and steamship across the Atlantic to feed the burgeoning populations of industrial Europe.

The division of labor between the farmer and the factory worker that arose within nations became visible on a world scale. Some nations found they could export food into the world market, earning money to buy the goods they could not or did not produce at home.

Others, such as Great Britian, became the producers of those industrial goods and also became increasingly dependent upon food imports. Since different states enjoyed different natural endowments, and some had especially generous amounts of fertile and well-watered agricultural land, a deepening international division of labor was generally welcomed as advantageous to all.

In the eighty years of this century, thanks to mechanization of agriculture, the development of new and higher-yielding seeds, and increased knowledge about farming techniques, total world food production has regularly outpaced population growth. This is not to say that the growing demand for food and the increased vulnerability of urban populations and food-importing countries have not created problems and pressures. Japanese imperialism in Taiwan and Korea was caused by part by Japan's search for a secure food supply. The colonial trading patterns of Europe also reflected such politically managed international divisions of labor. As a result, increases of productivity and food production were not shared equally by the peoples of the world even though improved conditions of health and food helped spur the rapid population growth of this century

Major International Activities

The world food system consists of two kinds of exchanges across countries--exchanges of food and exchanges of other items related to food production.

Food moves among countries on two kinds of bases: trade and aid. Commerical trade reflects the international division of labor that has emerged over the last century and which allows the world's people to take advantage of the differing production capabilities around the world. It also serves as a major resource upon which countries can draw when their own production falls short, or when they have a bumper harvest. India for example, which had been a chronic importer in the 1960's and early 1970's, found it advantageous to export wheat in 1978-79 when it had bumper crops.

Food aid is the other form of international exchange of food. Some countries are too poor to buy all the food they may need. At other times natural disasters or wars create emergencies where people face starvation. In these situations the [illegible]rnati[illegible] trading system has been supplemented as governments an[illegible]e organizations provide food as gifts or as highly subsidized [illegible]cessional sales. Until after World War II food aid has alwa[illegible] special and temporary

activity as governments and voluntary organizations responded to abnormal needs in other countries. Large American agricultural surpluses, however, in the 1950's created political pressures for disposing of these commodities. The result was the creation of an international food aid system which was largely American in the 1950's and 1960's. That system has become internationalized and institutionalized as other countries have joined and as American surpluses have disappeared and along with them the political pressure from American farmers to dispose of surpluses. In the 1950's food aid constituted as much as twenty percent of all international food movements. In 1980 less than ten million tons of cereal out of over one hundred eighty million tons traded (about 5%) was food aid.

From: Raymond F. Hopkins, "The Global Food System" in Global Issues: Food, James E. Harf, B. Thomas and Raymond F. Hopkins, Eds., Columbus, Ohio, Consortium for International Studies Education, 1980.

The Changing Pattern of World Grain Trade

Region	1934-38	1948-52	1960	1970	1972-73	1976
			(Million Metric Tons)			
North America	5	23	39	56	89	94
Latin America	9	1	0	4	-3	-3
Western Europe	-24	-22	-25	-30	-18	-17
E.Europe & USSR	5	-	0	0	-26	-27
Africa	1	0	-2	-5	-1	-10
Asia	2	-6	-17	-37	-38	-47
Australia & N.Z.	3	3	6	12	7	8

Note: Positive numbers indicate net exports; negative numbers indicate net imports

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Source: The Global Political Economy of Food, Raymond F. Hopkins and Donald J. Pachula, eds. Madison, Wisconsin: The University of Wisconsin Press 1978.

American Grain Exports -- 1978

(In U.S. $1,000)

By Region	Value Exported: Feedgrains[1]	Wheat	Soybeans
Canada	19,833	-	67,187
Latin America (including Carribean)	400,546	819,198	185,746
Africa (including North Africa)	143,294	506,188	24,855
Asia (including the Middle East)	1,657,277	1,479,267	1,367,817
Europe	2,951,784	831,936	2,951,074
Unknown[2]	311,720	239,814	152,370
Total Value	5,484,454	3,876,403	4,749,049

By Per Capita Income of County[3]	Feedgrains	Wheat	Soybeans
Countries with Per Capita Income over $2,000	$3,874,952	$1,230,969	$3,888,280
Countries with Per Capita Income Between $1,000 and $2,000	906,125	1,065,591	556,871
Countries with Per Capita Income Below $1,000	391,657	1,340,029	151,528

	Feedgrains	Wheat	Soybeans
Total Tonnage (metric) Shipped:	55,544,614	21,811,970	19,685,675
Average Price Per Metric Ton:	$102	$178	$241

1 Feedgrains are used as feed for animals, not direct human consumption. Wheat and soybeans categories are exports of these grains for direct human consumption.

2 Unknown destination because the grain was transshipped through Canada.

3 Table excludes figures for grain whose destination was unknown or not specifically indicated in original data tables.

American Grain Exports: Discussion Questions

1. What regions of the world buy the most grain overall from American farmers and grain companies? Does this surprise you? Why or why not?

2. What types of grain (feedgrain, wheat, soybeans) is most important to American agriculture in terms of export earnings? In terms of export tonnage?

3. What types of countries, richer or poorer, buy the most grain? How are their grain purchases different from other countries? How might you explain the difference?

4. Wheat could be called the "poor man's grain" in terms of world food trade. How does the information in the table show this?

ECONOMICS

FOOD AND THE GLOBAL DIVISION OF LABOR: EFFICIENCY VERSUS SECURITY AND EQUITY

DURATION: Approximately three class periods.

PURPOSE: To demonstrate the economic efficiency obtained through the division of labor.

To indicate how the division of labor can also raise issues of security and equity.

OBJECTIVES: Students will:

(1) Define economic efficiency and identify how the division of labor increases efficiency.

(2) Relate the domestic division of labor to the international division of labor that results from trade.

(3) Identify reasons why a division of labor can create problems of insecurity and inequity internationally and nationally.

BACKGROUND INFORMATION FOR TEACHERS:

The "division of labor" is a basic concept in economics. It is also a concept normally related only to the domestic economy. But because of the vast growth of international trade and the development of free trade areas as in Europe, a global economy, characterized by an imperfect but clearly discernable division of labor, has also begun to emerge.

An International Division of Labor

An international division of labor has become increasingly apparent in the global food system. (See the lesson "American Agriculture and the Global Food System.") Since World War II, trade in foodstuffs, particularly grains, has become increasingly important. While the amount of food traded internationally is only a small percentage of total food production, there has been an increased dependence on a few regions (i.e., North America, Argentina, Australia) for grain surpluses. Developing nations in particular have allowed their food production to lag behind needs or have encouraged investment in export production (e.g., tea, coffee, sugar, rubber, etc.) at the expense of food production for local consumption. Thus a "global" division of labor within agriculture and between agriculture and industry has begun to emerge.

Efficiency

As with any division of labor, this system can be more efficient in economic terms because of specialization based on comparative advantage. Yet, the present system is hardly efficient in any ideal

sense. In a perfectly efficient global food system, only those nations with a comparative advantage in agriculture would produce food. Nations with a cold climate, poor soil, or inadequate rainfall would invest their productive energies in other things -- manufactured goods perhaps. These goods would then be traded for food. In a perfect system fewer nations would presumably be producing more food and at lower unit costs than at present. Such a system would be much more interconnected through trade and thus much more interdependent.

This lesson uses a simulated division of labor between two countries to illustrate the efficiencies obtainable through trade. By using this "international" situation, students can see how basic economic concepts, such as the division of labor and economic efficiency, apply to the international economy. They can also be introduced to problems which attend the division of labor in security and in equity. These problems are implicit in any division of labor but are often more obvious and easier to deal with in an international context.

Security

A perfectly secure global food system is one in which minimum food needs are constantly met for everyone. A perfectly efficient food system is subject to various sources of insecurity. Over-reliance on one region increases the impact of bad weather and poor harvests. Dependence on a single producer increases the risk that one's food supply will be disrupted by war, by political or economic strife within the country, or by diplomatic conflicts between governments.

A perfectly efficient food system would concentrate production far more than a secure one. It would also produce less food than a secure system. A secure food system would require accumulating a surplus of food for use in keeping prices stable when harvests are poor and for use in relief efforts necessitated by war, or natural disasters. A perfectly efficient system would argue against surpluses which might never be used.

Equity

A perfectly efficient food system, because it would take the global division of labor to a logical extreme, could also become highly inequitable. Equity does not mean equality. It does mean equal opportunity and a fair distribution of the rewards of labor. Equity, in other words, is a political rather than an economic concept.

Leaders of Third World countries today argue that, as a vestige of their colonial past, they have become the "hewers of wood" and the "carriers of water" within the global economy. They argue, in other words, that they have become trapped in low paid, unskilled roles within the division of labor. They are trapped because, lacking an

industrial and scientific base, their economies have less opportunity to develop the technological innovations needed to succeed in the industrial world. They lack the industrial base to keep domestic industries competitive. Their arguments take on added importance when one considers that the terms of trade for raw materials, including food, have declined over the past thirty years in relation to manufactured goods. The hewers of wood must work harder and produce more simply to maintain their standards of living at present levels. This seems inequitable.

Security and Equity in the Domestic Economy

While security and equity issues are often more apparent within the international economy, they apply to the domestic economy as well. When farmers threaten to restrict production, or when coal miners and truck drivers threaten to go on strike, it becomes apparent that the division of labor with our economy makes us interdependent. It reduces the security of everyone within the system.

Questions of equity are also raised within the domestic economy. They are implicit in arguments for redistribution of income from the richer industrial states to the poorer agricultural states of the old South through federal programs. They are explicit in arguments by Western governors that their states must be compensated for depleting natural resources to feed the industrialized population centers elsewhere in the country.

MATERIALS: "Country Profiles: The Resources of Industria and Agraria;" and "Foreign Policy Briefing Papers" for Industria and Agraria to be used in the simulation.

VOCABULARY: Division of labor, economic efficiency, security, equity, dependence and interdependence, comparative advantage, trade, resources.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: After introducing the division of labor concept, remind students that a division of labor allows greater efficiency in production. Remind them also of the role of comparative advantage in determining who does what within an economy characterized by a division of labor.

Step 2: Explain that the division of labor exists within the international economy as well. In fact by increasing the size of

the economy, you make more productive resources and greater resource diversity available. So efficiencies can often be even greater by dividing productive roles internationally than nationally.

DEVELOPING THE LESSON

Step 3: To illustrate the efficiencies available through a division labor, introduce the Agraria and Industria simulation.

Divide the class into an even number of groups. Half of the groups will represent the country of Agraria; half the country of Industria. Each group should have about 2 or 3 students. The total number of groups is not important as long as it is an even number.

Project the "Country Profiles: Industria and Agraria" and describe them. Make certain students understand the terminology but do not overexplain their situation.

Step 4: Have the groups discuss among themselves what would be the most appropriate division of labor within their country given the limits imposed by the profile. Note that at this time, the countries may not consider trading with each other. Allow only about five minutes.

Step 5: Poll the groups quickly to find out what they have decided. Note that their options are extremely limited if they want to provide for the basic food needs of all their people.

Step 6: Tell the groups that they may now take into consideration trade with the other country. Have the groups once again discuss what would be the most "efficient" division of labor if Agriaria and Industria could trade -- ideally if they could be treated as if they were a single country. Allow between 10 and 15 minutes.

DAY 2

Step 7: Poll the class to find out their decisions from the previous day.

Discuss their reasoning and the concept of efficiency in this context. You might ask:

1. What is the most "efficient" division of labor between Industria and Agraria?

2. How does trade increase "efficiency?" Does efficiency in this case mean a better life for the people of the two countries? In what sense?

3. How might the introduction of trade into these countries hurt certain people at first? Are there parallels to what is happening now in the United States?

4. Do you see any problems which this "efficient?" division of labor might create? What are they?

Step 8: Then hand out an appropriate "Foreign Policy Briefing Paper" to each group. Have the groups prepare for negotiations with the other country by settling on a preferred division of labor in light of the briefing paper's arguments. Allow about 5 minutes.

Step 9: Have each Agraria group begin negotiations with one of the groups representing Industria.

Each side should present its arguments and its proposed division of labor. In summary, the group should state what they are prepared to trade with the other country and what they expect in return. (For example, Agraria might summarize by saying that they will agree to provide food for 4,000 people but they expect clothing and medicine for 6,000 in return.)

Once the positions are known, allow the groups about five minutes to argue the legitimacy of the other's concerns.

Step 10: Have the groups break off negotiations. In their smaller country groups, have them try to come up with a compromise formula which will satisfy their own concerns to some extent but also be agreeable to the other side. Allow about 15 minutes. (There should be no such compromise available given the constraints of the situation.)

DAY 3: CONCLUDING THE LESSON

Step 11: Ask the class whether any of the groups think they have found a compromise solution. If any have, have them describe it and use it as the basis for a discussion.

If none have, discuss the fundamental problem of balancing economic efficiency with security and equity. Relate the simulation situation to international concerns and to the national economy. You might ask:

1. How did the efficient division of labor between Agraria and Industria lead to insecurity? Was Agraria as well as Industria insecure? How?

2. Agraria and Industria will become interdependent when they begin to trade. Are people within the local and the national economy also interdependent? What does "interdependent" mean?

3. Are people within the national and local economy also insecure because of this interdependence? Suppose coal miners and truck drivers went on strike next week. How would this show our interdependence and our insecurity?

4. How did Industria try to increase its food security? Real countries have this option and one other. Can you think of what it might be? (Diversity food sources.) Can industrial workers within a country increase their food security in the same two way?

5. How did the efficient division of labor between Agraria and Industria raise the issue of inequity according to the Agrarians? What was potentially inequitable about the division of labor? Would the division of labor leave Industria with more opportunities than Agraria? Do you think this is inevitable?

6. Inequity is a less clear-cut problem than security because it depends on your perception of what is "fair." What is "unfair" about the situations Agraria might face in the future? Note that these situations are not in Agraria's interest, but that does not mean they are unfair. Do all people agree about what is fair or equitable? Do our own ideas about what is fair change overtime?

7. Are there situations in the American economy which are similar to the situation faced by Agrarians? (e.g., Blacks relegated to unskilled jobs, migrant farmers, women's roles.) Are those situation inequitable? In what sense?

8. How did Agraria try to solve the problem of inequity? Was their solution equitable? How have people in the American economy tried to solve their problems? (e.g., affirmative action, quotas based on race or sex) Is that solution equitable?

COUNTRY PROFILES

THE RESOURCES OF INDUSTRIA AND AGRARIA

Industria: Industria is a mountainous and crowded island nation, with a well trained industrial work force. Each worker-citizen of Industria is capable, in one year's work, of producing:

- either enough food to meet the annual needs of one person.
- or, enough clothing and medicine to meet the annual needs of two people.

There are 8,000 worker-citizens in Industria.

Agraria: Agraria is a spacious continental nation, with fertile soil, a temperate climate, and adequate rainfall. Each worker-citizen of Agraria is capable, in one year's work, of producing

- either enough food to meet the annual needs of two people.
- or, enough clothing and medicine to meet the annual needs of one person.

There are 8,000 worker-citizens in Agraria.

Foreign Policy Briefing Paper: Industria

(FOR YOUR EYES ONLY !!)

It has come to our attention that the perfectly efficient division of labor you want to develop with Agraria may not be all that secure for us. Consider the following situations.

Situation 1: Bad Weather in Agraria: Agraria is struck by a summer-long dry spell. Its food harvest falls 25 percent below usual levels. What will the government and the citizens of Agraria do? Will they export as much as usual to Industria? Only half as much? Perhaps they will tighten their own belts, and export as much as usual, but at twice the usual price!

Situation 2: Revolution in Agraria: Halfway through a good summer harvest, the citizens of Agraria discover that their government has been using some of the money earned from food exports to import luxury items, such as limousines for high government officials, rather than clothing and medicine for all. Those citizens stage a revolution. The revolution is resisted by the Army (which is led by officers driving limousines). The harvest is badly disrupted, and food exports are halted completely.

Recommendations: Increase food security by growing some at home (perhaps devoting up to 2,000 worker-citizens). Increase military power to deal with revolutions and wars by expanding the army (1,000 worker-citizens.) We could still produce a surplus of medicine and clothing (enough for 2,000 people) to trade. We would need to get food for 6,000 people. These "terms of trade" are reasonable. It takes more expertise and greater investments to produce medicine and clothing than food.

Foreign Policy Briefing Paper: Agraria

(FOR YOUR EYES ONLY!!)

It has come to our attention that the perfectly efficient division of labor you are planning to develop with Industria may not end up being very equitable for us. Consider the following:

Situation 1: Technological changes are occurring much faster in the medical and clothing industries than in agriculture. If we have no domestic industry, our economy will forfeit the spin-off benefits of these new technologies. Our educational system will lag behind that of Industria. Our people will not be able to compete with people from Industria internationally. We will become dependent on Industria for new scientific knowledge. We will eventually become a vassal state of Industria.

Situation 2: Technological changes in clothing and medicine are also making the workers of Industria more productive. At some point each worker in Industria will be able to produce twice the goods he or she can now. Similar advances are now occurring in agriculture. Even if they were, where would our farm workers go? We only need to grow so much food. And we would not have a domestic clothing and medicine industry in which to employ them. Eventually, Industria will be able to charge us more for their medicine and clothing than they can now. We will have to sell them more food simply to stay even. They will get richer relative to us, while we get poorer relative to them.

Recommendation: Create a relationship which is more likely to stay equitable. Develop domestic medicine and clothing industries, devoting about 2,000 workers to them. We will still need to import medicine and clothing for 6,000 people. We will be able to produce food for 12,000 people. This leaves a food surplus sufficient to feed 4,000 people. We can trade this for the medicine and clothing we need. The terms of trade seem fair and obtainable. The people of Industria need food more than medicine and clothing. Anyway, the technological changes described above will help them catch up in time.

ECONOMICS

ECONOMIC ACTORS: WHO'S WHO IN THE GLOBAL FOOD SYSTEM

DURATION: Approximately three class periods.

PURPOSE: To show students the variety of organizations and decision-makers, including international actors, which have an impact on an economic system.

To help students visualize the relationships among different organizations and actors in the world food system.

OBJECTIVES: Students will:

(1) Identify organizations and types of individuals who influence an economic system.

(2) Categorize these actors in terms of a matrix of economic actors.

(3) Identify actors within a case study of the Nigerian food system and identify the ways in which those actors do and could influence Nigeria's emerging food problem.

(4) Speculate on ways in which other types of economic actors might contribute to solving Nigeria's emerging food problem.

BACKGROUND INFORMATION FOR TEACHERS:

Individuals, producers and consumers of goods, are certainly the most numerous actors in an economy. In human terms, they are also the most important. But in political terms, they are often the least powerful. The transfers of resources that make up our local, national and global economies are controlled not by individuals qua individuals but by large groups and organizations. Broadly speaking, these organizations can be distinguished or classified on the basis of two sets of criteria: their functions and their location.

Distinguishing Economic Actors by their Functions

Three types of organizations are most important to our economy functionally: (1) governments and government agencies, (2) business firms or private profit-making organizations, and (3) private not-for-profit organizations. The latter two types of organizations are often referred to jointly as non-governmental actors.

Governments affect economic systems, including the global food system, through their ability to enact and enforce laws and their power to tax. National governments also enact laws regulating international

trade and investment, which is particularly important to the global economy.

Intergovernmental organizations, such as the United Nations and the Western Governor's Conference, exist largely to coordinate the activities and policies of member governments.

Both governmental and intergovernmental organizations often provide aid or support projects designed to develop or apply new knowledge related to the food needs of their people or other countries.

Business firms are obviously the back-bone of any capitalist economic system. They carry on the basic production and distribution activities which constitute the economy. In mixed or socialist systems these activities may be carried on by government agencies as well.

Not-for-profit organizations constitute the largest and often the least well defined of the categories. Not-for-profit organizations such as universities carry on research designed to make producers or consumers more effective or efficient. Other not-for-profit organizations such as foundations (e.g., the Rockefeller Foundation) support this research or other projects designed to bring new knowledge into practice. Most not-for-profit organizations, such as farmers and consumers groups, promote the interests of their members. They attempt to coordinate the activities or policies of their members, including business firms, and lobby to obtain favorable government policies.

Distinguishing Actors by their Location

Actors within the global food system, and the global economy, can also be classified in terms of their location, in a political sense. Most actors within the global food system are located within nations (sub-national). Their membership and their operations extend to only a part of their own country. Other actors are national in the sense that their operations and membership extend throughout a country, but one or the other does not extend beyond the country. The national government is one of the most obvious and powerful of national actors. It is national, even though its operations typically do extend beyond the country, because its membership (i.e., those for whom it speaks) does not. Finally, actors within the global food system can be international. Both the membership and the operations of these groups extend beyond the borders of a single country.

All three functional types of organizations (i.e., governmental, business and not-for-profit) can be found within each of these three categories. Regardless of their political location, the types of activities in which they are engaged will largely depend on their functional nature.

ECONOMIC ACTORS

Student Learning

This lesson provides a means by which instructors can make students aware that business firms and governments are not the only actors in an economic system. More importantly, perhaps, through a case study on Nigeria, the lesson shows how international actors, particularly other governments and intergovernmental organizations, can have an impact on critical food policies and problems within a country. Students have an opportunity to identify and to classify food system actors. They are also challenged to consider how other actors of various types might participate in solving Nigeria's agricultural problems.

MATERIALS: The charts "Actors in the Global Food System," and "Actors in the Nigerian Food System," and two readings "Types of Food System Actors," for use by the instructor, and "Food Problems in Nigeria."

VOCABULARY: Sub-national, national, international, business firm, government, government agency, private not-for-profit organization, economic system, food system, trade, aid, investment, loans, technology transfers.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: After introducing the unit on the role of government in the economy or the business firm, explain to students that other types of organizations also have an important effect on the economy.

Ask students if they can name other "actors," that is organizations or types of people who make decisions which affect the economy in some way. List these on the board as students suggest them. Ask students to describe how these "actors" affect the economy.

DEVELOPING THE LESSON

Step 2: Project a transparency of the matrix "Actors in the Global Food System." Go over the matrix and explain the kinds of actors within each of the cells, using information contained in the reading "Types of Food System Actors." Give examples of activities in which each type of actor engages.

Step 3: Have the students identify where the organizations and actors they suggested earlier fit into the matrix.

Step 4: Discuss the matrix and the students' suggestions with the class. Ask:

1. Were there types of organizations or actors which we did not suggest? Which one's? Why do you think we did not suggest them?

2. Were there organizations or actors which we suggested that do not fit within the matrix?

3. Which actors within the matrix do you think are the most important actors within the global economy? the American economy? the local economy?

Step 5: Hand out copies of the reading "Food Problems in Nigeria." Have students begin reading the article in class, completing it at home if necessary.

DAY 2

Step 6: Project a transparency of the graphic "Actors in the Nigerian Food System." Use it to discuss the reading on Nigeria with the class. You might ask:

1. Historically, the British Goverment was an important actor in the Nigerian food system. Why? How did it influence the system? How does it continue to influence the system?

2. Which actors have the most influence over the Nigerian food system now? How do they affect Nigeria's ability to feed itself?

3. How has the World Bank affected Nigeria? What types of international activities does the World Bank encourage?

4. The article does not mention any international business actors, like General Mills. But they are almost certainly involved in the Nigerian food system. How might General Mills be involved, and why do you think so?

5. What might the British Government, the World Bank and the U.S. Agency for International Development do to help solve Nigeria's problem?

6. Can these outside actors solve Nigeria's problem? Do they need the cooperation of actors within Nigeria? Which ones? Why?

7. What might the government of Nigeria do to solve the problem? How will the big farmers feel about that? Does it matter how they react?

8. The article suggests that basic political and economic changes might be needed if Nigeria is to solve this problem. Why, and what changes does it appear to suggest?

CONCLUDING THE LESSON

Step 7: Divide the class into groups of four or five. Project the original matrix of "Actors in the Global Food System" again and have each group pick three different actors from the matrix which might be able to help Nigeria solve its food problem in some way. They should pick one sub-national, one national and one international actor. They should also pick one governmental, one business and one not-for-profit actor. (For example, a group might pick a sub-national government, a national business, and an international not-for-profit actor.)

Then have the groups brainstorm ways in which each of these three actors might help Nigeria solve its problem. In doing so, they should pay attention to the types of international activities which tie the global food system together. They should also note whether the cooperation of other actors would be needed for the activity to be effective and what that cooperation would involve.

DAY 3

Step 8: If the groups have not completed their discussion, have them do so.

Step 9: Have each student select one of the three actors discussed in his or her group and prepare a one-page position paper detailing how that actor might help Nigeria solve its food problem.

ACTORS IN THE GLOBAL FOOD SYSTEM

	Governmental	Non-Governmental	
		Business	Not-for-Profit
Sub-National (local, state, province, region)	●City of New York ●Hubei Provice, China ●Western Governor's Conference (U.S.A.)	●Individual Farmers ●Agricultural Laboratories, Inc. ●Landmark, Inc. (cooperative)	●Individual Consumers ●Kansas State University ●Rue St. Martin Food Cooperative ●Hunger Task Force
National	●U.S. Government (Dept. of Agriculture) (Dept. of Commerce) ●Soviet Government (Gov't trading company)	●Federated Department Stores	●National Farmers Organization ●Consumers' Union ●Bread for the World
International	●UN Food and Agriculture Organization (FAO) ●World Bank ●International Wheat Council ●World Food Council	●General Mills ●Nestles ●Continental Grain	●International Federation of Agricultural Producers ●International Organization of Consumers Unions ●CARE

Types of Food System Actors

Actors in any economic or political system can be divided into three categories: (1) sub-national actors, (2) national actors, and (3) international actors. They can be further distinguished in terms of whether they are (1) governmental, or (2) non-governmental. The latter can further be divided into (a) business firms, and (b) not-for-profit organizations. While other categories can and are used, these provide a simple basis for understanding how a political economy is organized.

Sub-national Organizations

Sub-national actors include those organizations whose membership or operations are contained entirely within a portion of a country or nation. These include purely local organizations such as city governments, banks, county commissions, local food co-ops, even colleges. They include state-wide and regional organizations as well, such as a state government, state-wide or regional farm organizations, state-wide farm cooperatives, the Western Governors Conference, and regional food store chains.

Sub-national actors are obviously the most numerous actors within the food system. These are the functional bases of an economy. Banks, farms, farmer cooperatives, insurance companies, food distributors, food retailers, consumers and consumer co-ops make the food system within a country work. Colleges and universities provide research and services which enable producers and consumers to be more efficient. Local and state governments make laws which affect the profitability of food production and trade within their territories.

National Organizations

National actors include all groups whose membership or operations are contained within the boundaries of a specific country but which extend to virtually all parts of that country. Politically, national organizations are among the most powerful food actors. The most obvious national actor is the national government. Of course, national governments are seldom "unified" actors. For example, in Japan the Ministry of Agriculture and Forestry may prefer to restrict food imports, to protect farmers. The Ministry of International Trade and Investment may want to admit food imports to balance Japan's trade surplus with the United States. Similarly, within the United States the Department of Agriculture may be promoting grain exports to Russia while the National Security Council may be trying to halt those same exports.

The category of national actors also includes non-governmental groups. Within the United States the best known food system actors of this type are the general farm organizations (e.g., the American Farm

Bureau Federation, the National Farmers Union, the National Farmers Organization, and the National Grange) and producer associations (e.g., the National Association of Wheat Growers, the National Corn Growers Association, or the National Milk Producers Federation). Consumer groups (e.g., Consumers Union) have also emerged as increasingly important in recent years. In the United States it is sometimes said that the food and farm policies of the government merely reflect the combined desires of these national non-governmental groups.

International Organizations
International actors are those organizations or groups whose membership and operations extend beyond a single country. They include intergovernmental organizations of a regional nature, such as the European Economic Community which coordinates the food and food trade policies of its member governments. It also includes global organizations such as the International Wheat Council which provides a forum for national governments to negotiate coordinated food price and food aid policies.

The World Food Council (WFC) is representative of these intergovernmental actors. The WFC was established by the General Assembly of the United Nations following the 1974 World Food Conference in Rome. Its purpose is to mobilize support from national governments for three global food projects identified by the Rome conference. These were: (1) to increase food production in those countries where food is most needed, (2) to improve effectiveness in the world's food distribution system, and (3) to improve world food security. In its work, the WFC has been split on more than one occasion by the differing interests of its 36 member governments. The representatives of developing countries have wanted the WFC to concentrate on promoting more and more flexible food aid from rich countries and on changing protectionist policies in the rich countries which exclude agricultural products from the poor. The representatives from the rich industrial countries prefer instead to concentrate upon changing policies within the poor countries.

Even if its members could reach perfect agreement, the WFC like other intergovernmental organizations could not command national governments to follow its recommendations. Its functions are to advocate and to coordinate, not to govern.

The World Bank and the FAO
Two of the most important food system actors of this type (i.e., international and intergovernmental) are the International Bank for Reconstruction and Development (IBRD), known as the World Bank, and the United Nations Food and Agriculture Organization (FAO).

The World Bank receives financial support from national governments which it then uses to finance development projects in less developed countries. The World Bank is now the largest single source of external funding for food and agricultural development in the world. By itself it provides more than 40 percent of the total external funds available. At any one time, the Bank may find itself funding as many as 275 separate projects, in as many as 75 different countries. When the Bank lends money, it does so on its own initiative and according to its own guidelines. This relative independence has caused some to call the World Bank a "supra-national" organization (i.e., above the nation state). However, the Bank's sources of funding and its weighted voting mechanism, based on contributions, do concentrate decision-making power in the hands of the wealthy capitalist countries. The United States is the largest single contributor to the World Bank.

The Food and Agriculture Organization (FAO) performs a variety of global food aid and information gathering tasks. It collects data used by other actors (including the World Food Council) in reaching food policy decisions. The FAO also works with the World Bank, assisting the Bank in identifying food projects for possible funding.

Non-governmental International Actors

Besides the intergovernmental actors, the global food system includes a tremendous number of non-governmental organizations. These include business firms, or organizations whose purpose is to make a profit through economic activity. It also includes a wide variety of not-for-profit organizations, many of which promote the interests of various business and other groups within governmental and intergovernmental organizations. These non-governmental international actors are sometimes called "transnational" actors.

Perhaps the most important of the non-governmental groups are the many private international business firms which invest in food and agricultural production (e.g., General Foods, Heinz, Kraftco) or which sell food and agricultural products (Continental Grain, Ralston-Purina, Deere and Company). Business firms are generally considered to be international only if they have productive facilities in two or more countries.

Other non-governmental international actors include not-for-profit organizations whose memberships come from more than one country. Private food aid organizations such as CARE and Catholic Relief Service fall within this category. So do many organizations which represent the interests of professional groups, businesses or others (e.g., the International Federation of Agricultural Producers, and the International Organization of Consumers Unions).

The Activities of Food Actors

The activities in which food actors engage can obviously be quite varied. Among the more important are trade, capital transfers, either as aid or in the form of investments and loans, food aid, and technology transfers. Trade and food aid are generally thought of as the principal activities of the global food system. However, the remaining food system activities can be even more important especially to developing countries.

Scarcity of capital in developing countries often results in the utilization of underproductive technologies or the inefficient use of land resources. Money may be needed to buy new equipment, new seeds, or sufficient fertilizers. Capital may be needed to develop adequate transportation and storage facilities so that less food goes to waste. Thus capital transfers through investments, aid or loans can be quite important.

The transfer of existing technologies as well as the development of new technologies can also be critically important to increasing food production and availability. Technological innovations can include new cultivation and planting techniques, new storage practices, better irrigation techniques as well as improved seeds and new equipment. International, along with national and sub-national actors from other countries, are routinely engaged in these activities.

FOOD PROBLEMS IN NIGERIA

Nigeria is the most populous nation in Africa, with about one third the population of the United States. Nigeria is also one of the most fortunate nations in Africa. It is an oil exporting country (the fourth largest oil exporter in the world). For the past decade it has been a leading beneficiary of the increase in oil prices. Nonetheless, Nigeria is soon to face a very difficult food problem.

The Trouble Ahead

Demand for food in Nigeria has been growing very rapidly. This has been due both to rising incomes and to rapid population growth. Nigeria's already large population has been growing six times as fast as the nation's food production. These larger food demands are offsetting increases in food production so much that by one estimate, Nigeria will experience a 20 million ton "food deficit" by 1990. This is a quantity of food almost equal to what all of Nigeria produces today. Between now and 1990, as the gap between food supplies and food needs in Nigeria begins to widen, the price of grain (a large portion of the Nigerian diet) will increase. The result will be serious malnutrition among Nigeria's poor, particularly in the countryside where the poorest Nigerians live.

Actors in the Nigerian Food System

The Nigerian food system has been and continues to be affected by the decisions of a great many actors. Many of these actors are not Nigerians. Nonetheless, whether Nigeria can solve its food problem before it becomes too severe will depend on these actors' policies. Consider the following:

1. The Government of Great Britain: Great Britain colonized Nigeria a century ago. In doing so Britain "distorted" the food economy of the country. The British government encouraged Nigerians to produce cash crops for export (such as peanuts, palm kernels, cotton, and cocoa beans) rather than food crops for consumption at home. While a colony, Nigeria developed the habit of producing what it could not eat, while importing (at growing expense) ever larger quantities of food to meet the needs of its growing population. Even now the British government encourages this system of "export agriculture." As part of the British Commonwealth (the former British Empire), Nigerian exports to Britain have special access (e.g., lower tariffs and higher quotas) to the British and European market.

Despite its oil exports, Nigeria is experiencing balance of payments deficits ($4 billion in 1978). While Nigeria continues to export about $1 billion worth of agricultural products every year, it grows increasingly dependent upon expensive imports of grain, about $300 million worth in 1977. Nigeria must import practically all of its needed supplies of what. And demand for wheat is soaring as bread becomes an increasingly important part of the Nigerian diet.

2. The World Bank. The World Bank made its first loan to Nigeria in 1971. It has now replaced the U.S. Agency for International Development (AID) as Nigeria's largest single source of external assistance for rural development. By 1977, the World Bank had lent almost $400 million for agricultural projects in Nigeria. To date, however, these projects have had a bias toward cash crop and large scale farming operations. The Bank's first loan went to support Nigerian cocoa production.

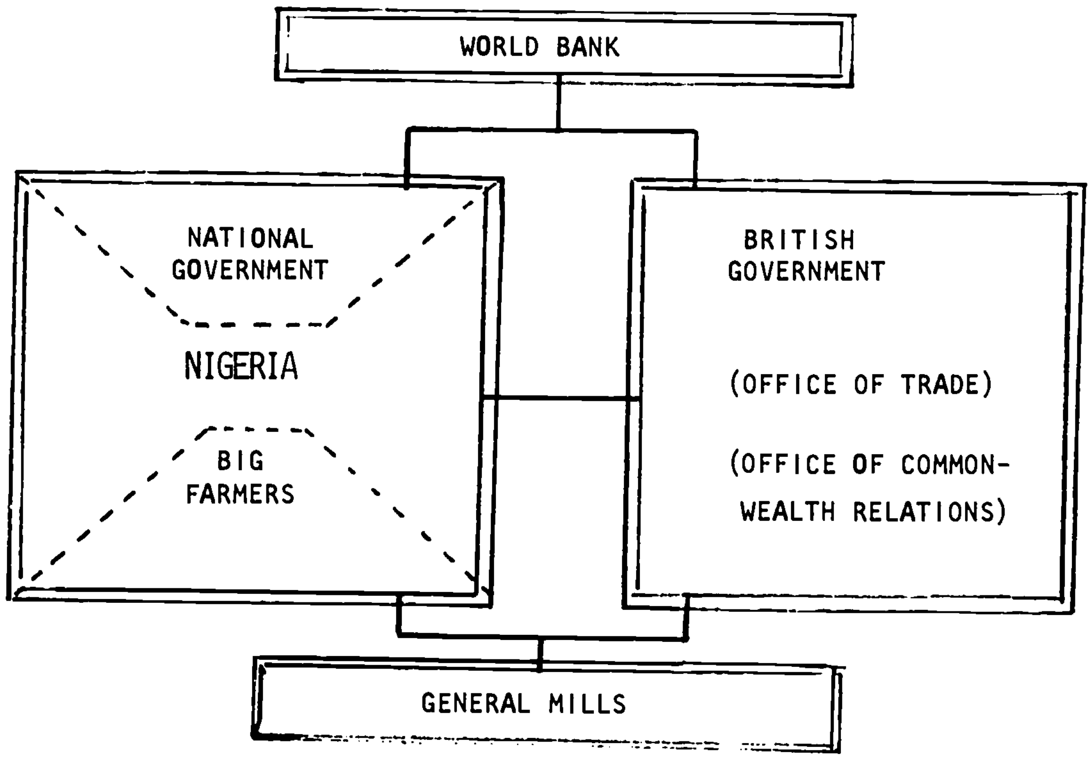
The World Bank is sometimes accused of supporting only those agricultural projects which will preserve a favorable climate for private bank and corporate investment. This means that they try not to disturb the stability of the government, and the security of private property. Both of these may have to be disturbed if Nigeria's food problem are ever to be solved, for national and sub-national actors also have a large influence on the country's food system.

3. The National Government of Nigeria: The Government of Nigeria has announced its intention to promote food production within Nigeria. President Shagari, for example, recently announced his plans to achieve agricultural "self-sufficiency" by 1985. Efforts have already been made by the government to reduce food imports, through trade restrictions. These efforts have been premature, however. They produced a rapid increase in food prices within Nigeria and so had to be dropped. The government of Nigeria tried to restrict food imports before boosting Nigeria's own food production.

Actually, the Nigerian Government has not been spending very much on food production. Government expenditures on all kinds of agriculture (including the production of crops which have no food value) account for less than 10 percent of the total national budget. The Government's National Accelerated Food Production Program (NAFPP) is still in the experimental stage. The Government's National Grain Production Company is still in the planning stage.

4. Big Farmers in Nigeria: When the Government of Nigeria does act to promote food production, it does more to benefit big farmers than small ones. Grain, the food source most in need in Nigeria, is produced by large numbers of small farmers. Small farmers are responsible for more than 90 percent of Nigeria's total agricultural output. Farms are extremely small in eastern Nigeria, where population density is highest. To please big farmers, however, government programs have emphasized the introduction of mechanized farming techniques and large scale farming. Meanwhile, the vast majority of farms in surrounding villages continue to use crude and underproductive farming techniques.

ACTORS IN THE NIGERIAN FOOD SYSTEM



ECONOMICS	THE AGE OF OIL AND THE GROWTH OF THE GLOBAL PETROLEUM INDUSTRY

DURATION: Approximately four class periods.

PURPOSE: To show students the role of foreign countries and international trade in providing energy resources.

To show students how U.S. oil companies have become international as international sources of oil have become more important.

OBJECTIVES: Students will:

(1) identify two reasons why the use of oil grew historically;

(2) identify the major oil producing countries and the major oil companies; and

(3) suggest alternative energy sources for the future.

BACKGROUND INFORMATION FOR TEACHERS:

In the last decade, one critical reality of economic and industrial development has been brought home to Americans and people around the world. Energy is one of the fundamental bases of an economy, particularly an industrial economy.

The Energy Transition

Of course, throughout history people have sought to develop new energy sources that expand their ability to do physical tasks. The domestication of animals, the harnessing of wind and water power, and the burning of fossil fuels have all accompanied radical changes in the economies and the technologies of man. We are currently undergoing an equivalently radical change, but with a difference. For the first time in history, the change in our primary sources of energy is being forced upon us. In the past new and cheaper sources of energy have pushed aside less attractive or more expensive ones. We do not have a more attractive and cheaper alternative source of energy today.

Student Learning

This lesson provides students with an opportunity to grapple with the problems of oil dependence in a structured way. A reading outlining the history of the oil age provides a substantive basis for discussing not only the "oil crisis" but also energy futures. It also indicates the

importance of the international oil companies in the history and future of energy.

An exercise involving research with oil company annual reports provides an active, hands-on learning experience which reinforces information about the global nature of the oil industry.

MATERIALS: Copies of the article "Energy, Economic Growth and the Petroleum Industry" for each student, copies of the annual reports of major oil companies, art materials for bulletin board displays, overhead projector and transparencies: "Alphabetical Lists of Major Oil Producing Countries" and "The Ranking of Major Oil Producing Countries;" an outline map of the world.

ARRANGEMENTS: Write to several major oil companies for copies of their latest annual reports. (See attached list of oil company addresses). Allow at least two weeks for the reports to come.

VOCABULARY: Petroleum, oil producing country, industrial economy, oil glut, oil crisis, multinational corporation.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: Introduce this lesson by projecting the transparency "Alphabetical List of Major Oil Producing Countries." Ask students, on a blank sheet of paper, to indicate which countries they think are the three largest and the three smallest oil producers in the list.

When the students' lists are complete, project the second transparency "The Ranking of Major Oil Producing Countries."

Step 2: Use the ranking exercise as a means to begin a discussion about the reasons for American dependence on imported oil, and the importance of energy and oil for an industrial economy. You can ask:

1. How many of you thought the United States, despite the fact that we have become dependent on oil from foreign countries, is still the world's third largest oil producer?

2. How do you explain the fact that the United States can be the world's largest oil producer and still be dependent on imported oil?

3. How is oil used in our economy? We use oil every day -- how?

4. Which kinds of countries would you expect to use the most oil? Which the least?

DEVELOPING THE LESSON

Step 3: Hand out copies of the article "Energy, Economic Growth and the Petroleum Industry." Assign the reading as homework. Allow students to begin reading in class if time permits.

DAY 2

Step 4: Discuss the homework reading assignment with the class. You might use the following questions as a guide to the discussion:

1. This has been called the age of oil. According to the article, when did this age begin and is it likely to last much longer?

2. Why was oil such a good source of energy in the past?

3. According to the article, two big problems with oil are periodic "oil gluts" and "oil crises." What are oil gluts? Why do they happen? What is the oil crisis? Can you have an oil glut amidst an oil crisis? Why? What problems might this create?

4. From what country do most of the large multinational oil companies come? What are the companies? The dominance of American and European companies has caused problems globally. What problems does the article suggest and why do you think these were problems?

5. What other countries have been among the most important oil producers according to the article? What has been the role of the oil companies in those countries?

6. The United States originally restricted imported oil. Why? With what effects according to the article?

DAY 3

Step 5: Divide the class into groups of three or four students. There should be one group for each of the oil company annual reports you were able to obtain.

Introduce the following exercise by noting that the major oil companies are an important part of the history of oil, the current energy problems, and our energy future. This exercise provides an opportunity to learn more about these companies and the global nature of the oil industry.

Step 6: Give one oil company annual report to each group. No two groups should work on the same company.

Have the groups look through the annual reports and find answers to as many of the following questions as possible:

a. In what countries is the company active? When did it get involved in each?

b. In what stages of the industry (i.e., exploration, production, transport, refining, marketing) is the company involved? Is this involvement changing and why?

c. Does the company appear to depend more on foreign or U.S. sources of oil?

d. In what other industries is the company involved?

e. Is the company investing in alternative energy sources? If so, which ones?

Step 7: When the groups have answered as many of these questions as they can given the information in the annual report, hand out art materials and have the groups prepare a visual display of their research.

The displays should include an outline map roughly indicating places in the world in which the company is active. The other information should also be portrayed as simply and graphically as possible.

DAY 4: CONCLUDING THE LESSON

Step 8: When the displays are completed, have the groups set them up around the room.

Step 9: Discuss the research with the class by asking:

1. How important are foreign sources of oil to the companies you researched? Do you think foreign sources of oil appear more or less important to the companies than to American consumers generally?

2. In what stages of the industry are these companies involved? Do you think this makes the large oil company more or less powerful? Why? What changes appear to be occurring in this pattern? Why?

3. It has been argued that oil companies need less regulation so they can get more profits to find and produce more oil. Do you agree or disagree? In what other industries are these companies involved and does this suggest anything about how higher profits might be used?

4. Higher profits could also be used to develop other energy sources. Are these companies investing in other types of energy sources? Which ones?

MAJOR U.S. OIL COMPANY ADDRESSES

The following are addresses to which you can write to obtain copies of the annual reports of the major U.S. oil companies. These will be provided free of charge by publicly owned companies.

The eight largest oil companies in the United States are: Exxon, Texaco, Mobil, Gulf, Standard Oil of California, Standard Oil of Indiana, Shell and Atlantic Richfield. Combined, these eight account for approximately 55% of all gasoline sold in the United States.

Amerada Hess Corp.
1185 Ave. of the Americas
New York, NY 10036
(212) 997-8500

Atlantic Richfield Co.
515 S. Flower St.
Los Angeles, Ca. 90071
(213) 486-3511

Cities Service Co.
110 W 7th St.
Tulsa, OK 74102
(918) 586-2211

Conoco Inc.
High Ridge Pk.
Stamford, CT 06904
(203) 329-2300

Exxon Corp.
1251 Ave. of the Americas
New York, NY 10020
(212) 398-3000

Getty Oil Company
3810 Wilshire Blvd.
Los Angeles, CA 90010
(213) 381-7151

Gulf Oil Corp.
435 7th Ave.
Pittsburgh, PA 15230
(412) 263-5000

Marathon Oil Company
539 S. Main St.
Findlay, OH 45840
(419) 422-2121

Mobil Corp.
150 E. 42nd St.
New York, NY 10017
(212)883-4242

Phillips Petroleum Co.
Keeler Ave. between 4th/5th
Bartlesville, OK 74003
(918) 661-4400

Shell Oil Co.
One Shell Plaza
Houston, TX 77001
(713) 241-6161

Standard Oil of California
225 Bush St.
San Francisco, CA 94104
(415) 894-7700

Standard Oil of Indiana
200 E. Randolph Dr.
Chicago, IL 60601
(312) 856-6111

Standard Oil of Ohio
101 Prospect Ave. NW
Cleveland, OH 44115
(216) 575-4141

Sun Oil Co. of PA
1608 Walnut St.
Philadelphia, PA 19103
(215) 972-2000

Texaco, Inc.
2000 Westchester Ave.
White Plains, NY 10650
(914) 253-4000

Union Oil Co. of CA
461 S. Boylston
Los Angeles, CA 90017
(213) 486-7600

ALPHABETICAL LIST OF MAJOR OIL PRODUCING COUNTRIES

China (People's Republic)

Iran

Iraq

Kuwait

Libya

Nigeria

Saudi Arabia

Union of Soviet Socialists Republics

United States of America

Venezuela

RANKING OF MAJOR OIL PRODUCING COUNTRIES (1979)

	Country	Thousands of Barrels of Oil Per Day on Average
1.	USSR	11,470
2.	Saudi Arabia	9,525
3.	USA	8,515
4.	Iraq*	3,400
5.	Iran*	3,030
6.	Kuwait*	2,510
7.	Venezuela*	2,360
8.	Nigeria*	2,305
9.	China (Peoples' Republic)	2,120
10.	Libya*	2,075

*Members of the Organization of Oil Exporting Countries (OPEC)

Other Major Producers included:

11.	United Arab Emirates*	1,830
12.	Indonesia	1,595
13.	United Kingdom	1,565
14.	Canada	1,500
15.	Mexico	1,455
16.	Algeria	1,000

ENERGY, ECONOMIC GROWTH AND THE PETROLEUM INDUSTRY

Early people depended mainly on their own muscles for the energy they needed. Human energy was used to do work. It was also used to transport people and their belongings from place to place. Over time, nonhuman energy sources began to replace human labor. The use of animal power, the wheel, sails for ships, and the steam engine were all important breakthroughs in energy. So was petroleum.

The Oil Age

The use of petroleum as an energy source allowed workers to use machines. This greatly increased their production. A worker today, using machines powered by gasoline, can produce much more than a worker could doing the same job 100 years ago. Gasoline-powered vehicles transport people and goods great distances in far less time than did earlier forms of transportation.

The use of petroleum, and the oil age, are recent events. The world's first oil well was drilled in 1859 in Titusville, Pennsylvania. Three years later, John D. Rockefeller began Standard Oil, which quickly became the leading oil company in the world.

Oil is an attractive energy source for many reasons. With the development of the internal combustion engine, it became the easiest and safest fuel to use for transportation. Oil has also been relatively cheap compared to its principal competition: coal. Coal mining is labor intensive. As a result the coal industry has been involved in repeated labor disputes. Oil is capital and technology intensive. So labor disputes have not stopped the flow of oil or increased its cost.

Oil Gluts and Oil Crises

A consistent problem throughout oil's history has been overproduction or gluts. The problem comes in part from the "rule of capture." This principle says that the owner of an oil well can pump oil out of that well no matter whose land is being drained. So if neighbors draw oil from the same underground deposit, they have an incentive to pump as soon and as fast as possible. And this is what has happened, even when there has not been enough demand for the oil.

In contrast to the problem of periodic oil surpluses is the problem of oil depletion. World War I was a period of great government-oil industry cooperation within the United States. The expansion of oil production during that period helped to create the first petroleum age "oil crisis." In 1919 the head of the U.S. Geological Survey predicted that American

oil fields would be exhausted within ten years. Ten years later, in 1929, the U.S. had major oil surpluses. In that decade, the oil industry had gotten the now famous oil depletion allowance. The depletion allowance provided tax relief and raised oil company profits. These profits were used for expanded exploration. New discoveries swelled U.S. reserves.

Many people today question predictions that U.S. oil production peaked in 1970 and will never again attain that level. They argue that increased oil company profits will expand exploration and help create new technologies which will expand our "recoverable" reserve of oil. As of 1980, however, the prediction that U.S. oil production has already peaked and started a slow decline has been fully supported.

The Oil Industry

The fact that oil production is capital and technology intensive has also given rise to concentration in the industry. Such concentration has long been a major political issue. Standard Oil, for example, controlled 87% of the U.S. supplies and 82% of U.S. refining capacity in 1900. In 1911 Standard Oil was broken into 34 companies by the U.S. government after lengthy anti-trust proceedings.

In more recent years, the oil industry globally has been dominated by seven major oil companies. Five of these (Texaco, Gulf, Mobil, Standard Oil of California, and the giant Exxon -- formerly Standard Oil of New Jersey) are U.S. based. The remaining two, British Petroleum and Shell, are European. Three of the five U.S. giants were originally part of Rockefeller's Standard Oil empire: Exxon, Mobil and Standard Oil of California.

The rise of OPEC control over production has somewhat reduced the role of some of the seven major oil companies. It has given rise to a new production giant as well: the National Iranian Oil Company (NIOC).

Oil and Texas

Texas has historically been the center of the U.S. and even the global oil industry. Because of the size of Texas production, the state has always had an effect on the availability of oil, nationally and globally. In the 1920's, the Texas Railroad Commission imposed an allocation system to restrain production and avoid oil gluts. Oil surpluses had been a problem for decades and had repeatedly led to violence in the oil fields. The authority to restrain and allocate production was necessary to keep supplies of oil stable, and to avoid major price-cutting by oil companies until the early 1970's.

Texas' oil clout has also made it the center of the petroleum industry's national political strength. The Petroleum Club in Houston has attracted most post-World War II presidential candidates during their search for campaign funds. Words important to the oil men included "depletion allowance" and "import quotas." Until 1976, when campaign financing laws changed, the contributions which came from the Texas oilmen could be critical to campaigns.

Production in Other Countries

Although the U.S. has dominated the global petroleum industry, it has not been without competition. Major oil strikes were made in Baku on the Caspian Sea in the 1870's. This area was the first to challenge Standard Oil's dominance of European paraffin sales. World War I greatly reduced the area's competitiveness.

In the 1920's, Mexico became the world's second-largest producer after the U.S., providing 25% of world oil. U.S. and British firms controlled the Mexican industry. Local unrest resulted in the patrol of U.S. naval vessels off the Gulf coast of Mexico. According to the U.S. Secretary of State, this was to give the Mexicans "a proper degree of wholesome fear." The industry was nationalized by Mexico in 1938. In response, the international companies boycotted Mexican oil. This helped to keep the Mexican oil industry out of international markets until the 1970's.

In the 1940's, Venezuela became a major producer, second to the U.S. by 1946. A new government in 1958 began to exercise more control over the foreign companies, which again controlled the local industry. As the government's role increased, Venezuela's international role dropped. The companies were nationalized in the 1970's.

Iran was the first major producer in the Mideast. The Anglo-Persian Oil Company was formed in 1913. After World War II, the U.S. oil industry established its position in Iran. The U.S. industry also dominated that area during the explosion of Persian Gulf and Arabian Peninsula oil discoveries throughout the 1950's and 1960's. The international (predominantly U.S.) industry purchased "concessions" giving them full exploration, production, and pricing control. At the beginning of the 1970's, this new center of global oil production contributed about $2 billion annually to the U.S. balance of payments because of U.S. oil company profits.

Oil Gluts and Oil Dependence

The increase of oil production in the Persian Gulf created major global surpluses. The cost of Persian Gulf oil was so low that U.S. domestic producers began to lose control of the S. market. In 1947, the U.S.

became a net oil importer for the first time. By 1953, 10% of the oil used in the U.S. was imported. The U.S. oil industry was not happy and pointed to the security threat of foreign oil dependence. In 1954, voluntary quotas were set at 12% of East-of-the-Rockies oil consumption. In 1959, they ceased to be voluntary. This protection of the domestic market created major windfall profits for the domestic oil and even the coal industries. Although it maintained the U.S. as the world's largest producer, it cost domestic consumers as much as \$4-\$7 billion annually. Domestic crude in New York City was twice the price of imported (\$3.00 versus \$1.50).

Western Europe and Japan took much fuller advantage of the inexpensive oil which was kept even less expensive by U.S. exclusion from the market. Cheap oil helped fuel the post-war economic miracles in these areas. It has been argued that this indirect support of Europe by the U.S. was as important as the Marshall Plan, which provided direct economic aid after World War II.

The import quota policy has since been criticized as a policy to "drain America first." It ran up against growing domestic demand and the inability of domestic producers to meet it by 1970. Quotas were loosened in 1970 and 1972. They were abolished in 1973, just <u>before</u> the latest "oil crisis" began.

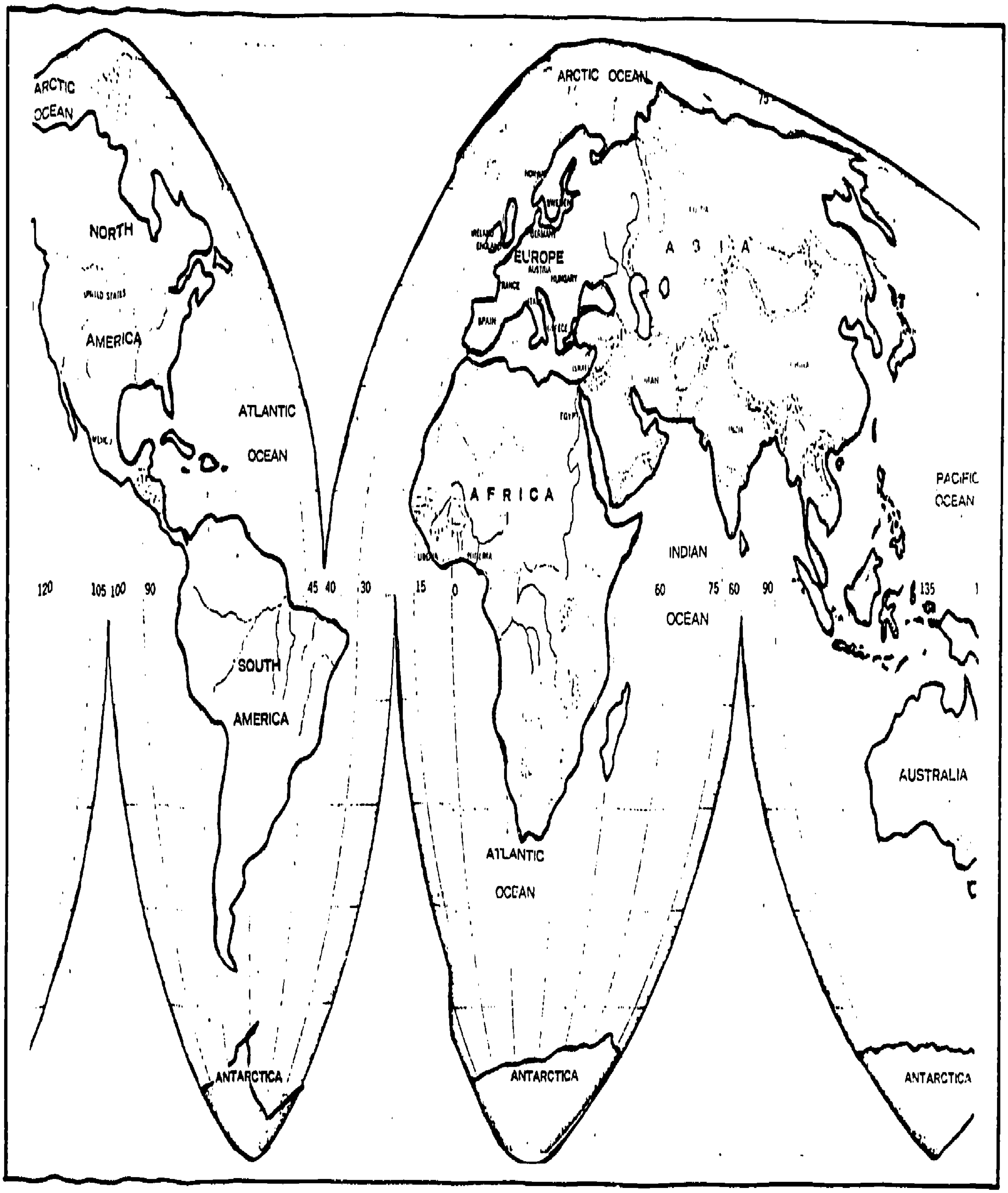
The Cost of Depending on Oil

Although greater use of petroleum has improved our lives, this improvement has come at a cost. Today, we are more aware than ever before that petroleum is a nonrenewable resource. The remaining oil and natural gas reserves are harder to find. The cost of getting the oil out of the ground has increased. Importing oil is costly and makes our country depend more on other nations for this valuable resource.

Fortunately not all the energy news is bad. The big oil field in Alaska has boosted our country's oil supply. Although opinions differ about how much oil is in the world, in 1977 most experts agreed that there were at least 600 billion barrels of recoverable oil -- that we know about. Further exploring and improved methods of recovering oil may increase that figure. For example, one of our country's largest potential sources of oil is shale oil. As much as 1,000 billion barrels of petroleum may be locked in oil shale. Oil companies are trying to develop economical methods for recovering this petroleum without seriously damaging the environment.

We have been using energy in the United States at an increasing rate. In fact, the United States uses far more oil than any other country. To

meet this demand, many oil companies have expanded their role. They see themselves as companies that supply energy rather than just petroleum products. As a result, they have bought coal companies and acquired large coal deposits for future development. They are also developing uses for the available nuclear energy, geothermal energy, and solar energy. The large oil companies now spend billions of dollars each year on research and the construction of new facilities to provide needed energy.



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ECONOMICS

THE ECONOMIC IMPACT OF OPEC DECISIONS

DURATION: Approximately three class periods.

PURPOSE: To show students the reasons for the success of the Organization of Petroleum Exporting Countries (OPEC) and the economic impact of high energy prices.

OBJECTIVES: Students will:

(1) Identify principal energy deficit regions and their principal energy suppliers,

(2) Explain the success of the OPEC cartel in terms of supply and demand elasticities,

(3) Identify three ways in which expensive energy has affected economies around the world,

(4) Analyze the relationship between crude oil prices and gasoline prices, and between gasoline prices and consumer demand.

BACKGROUND INFORMATION FOR TEACHERS

The early 1970's may historically represent a watershed period within the global economy. It marks a period in which governments of the resource-rich Third World first successfully manipulated the world market to their advantage. It marks the end of the era of cheap energy, an era which made possible the rise of modern industry and technology.

OPEC and the World Market

The rise of the Organization of Petroleum Exporting Countries (OPEC) has had and may continue to have a critical impact on life and economics within the United States and around the world. While the history of oil has been characterized by economic concentration, only within OPEC has that concentration of decision-making power coincided with such a favorable market situation. As never before, today's world is highly dependent on oil for its energy. At the same time, the global supply curve for oil may also be nearing its peak. We are entering a period in which increases in demand may not be matched by increases in supply.

The reality of OPEC's power, thus, lies primarily in the economics of the global market. It is no coincidence that OPEC's ability to manipulate the world market rose just as the United States entered the world oil market as a major consumer. Nor is it simply a coincidence that changes in life styles of Americans (e.g., conservation, smaller cars) have coincided with oil surpluses and easing pressure on prices.

The Economic Impact of Expensive Energy

Nonetheless, OPEC's ability to control and radically raise oil prices in the 1970's has had an impact on economic, social and political conditions around the world. Between 1973 and 1979 OPEC quadrupled the price of oil on the world market. This may have done little more than keep oil slightly ahead of inflation from an historical perspective. Yet, this represents a fundamental change in the terms of trade between energy suppliers and industrial consumers which will probably continue into the foreseeable future.

The relatively high price of energy has had immediate and visible impacts. It has raised the cost of heating and transportation for families. This in turn has caused rather dramatic changes in life style and values. It has transformed the American auto industry, the single most important economic force within the American economy. Higher energy prices have helped to cause lower growth rates, inflation and recession in countries around the world.

Student Learning

This lesson can be used independently or as a follow-up to the preceding lesson: "The Age of Oil and the Growth of the Global Petroleum Industry." It can be used within units on economic growth or resources, markets and market distortions, or international trade.

The lesson provides students with an opportunity to learn more about the forces behind the energy situation which confronts the world economy. At the same time, the analysis permits the introduction or reinforcement of key economic concepts such as the market, market distortions, market concentration and monopoly, demand elasticity, supply elasticity, etc. A problem-solving exercise is used to show the actual impact of OPEC price increases on the lives of students, and simultaneously outlines the various production stages in this important industry.

MATERIALS: Transparencies of three charts and graphs: "The Movement of Crude Oil in World Trade," "World Energy Production and Consumption," and "From Whence the Cost of a Gallon of Gas?" The article "The Energy Crisis of the 70's" and copies of the worksheet "Analyzing the Effect of OPEC Price Increases."

VOCABULARY: OPEC, market, market distortions, demand elasticity, supply elasticity, balance-of-payments, inflation, unemployment, cartel, conservation, concentration.

THE ECONOMIC IMPACT OF OPEC DECISIONS

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: Introduce this lesson by reminding students that the United States, while the third leading oil producing country and the leading energy producer in the world, also runs an enormous energy deficit. That is, we consume far more energy than we produce.

Project the map "World Energy Production and Consumption." Have students identify the world's energy deficit regions and countries, on the basis of the map.

Ask students what the energy deficit countries have in common.

Step 2: Project the map "World Petroleum Trade." Most of the world's energy trade is in the form of oil, but not all. Ask students if they can identify other sources of energy which move in world trade. Ask them to identify, on the basis of the map, the sources of petroleum for (a) the United States, (b) Europe, and (c) Japan, the world's principal energy deficit areas. Based on the map, from which region do most of the world's oil exports come?

DAY 2: DEVELOPING THE LESSON

Step 3: Lecture/Discussion.

Explain to the class the linkage between increased American need for imported oil and the rise of the Organization of Petroleum Exporting Countries. The discussion can be organized around the reading "The Energy Crisis of the 70's" which you might share with the students.

Stress that the ability of OPEC to raise prices dramatically during the last decade has primarily been the result of high demand in relation to supply. You might introduce the concepts of demand and supply elasticity as discussed in the article.

Step 4: Conclude the discussion by asking students what they see as the effect of high oil prices, and high energy prices generally. Have them enumerate the kinds of products whose price increases because they require oil or natural gas as a raw material (e.g., plastic products, industrial chemicals, fertilizers) or require extensive energy inputs in the production process (e.g., aluminum, grain, grain-fed beef). List the students' suggestions on the chalkboard.

Step 5: When students have run out of suggestions introduce the more systemic effects (that is lower growth, inflation and unemployment) discussed in the article.

DAY 3:

Step 6: Hand out copies of the worksheet "Analyzing the Effect of OPEC Price Increases" to each student or pair of students. Project a transparency of the pie chart "From Whence the Cost of a Gallon of Gas?"

Have students complete the worksheet, using information from the transparency.

CONCLUDING THE LESSON

Step 7: Discuss the questions on the worksheet with the class.

Depending on the capabilities of the students, you may wish to introduce many of the complexities which the worksheet ignores during this discussion. You will want to stress how the increase in the cost of crude oil changes the values of many different cost factors, including transportation in particular. This underscores the inflation potential of increased energy prices.

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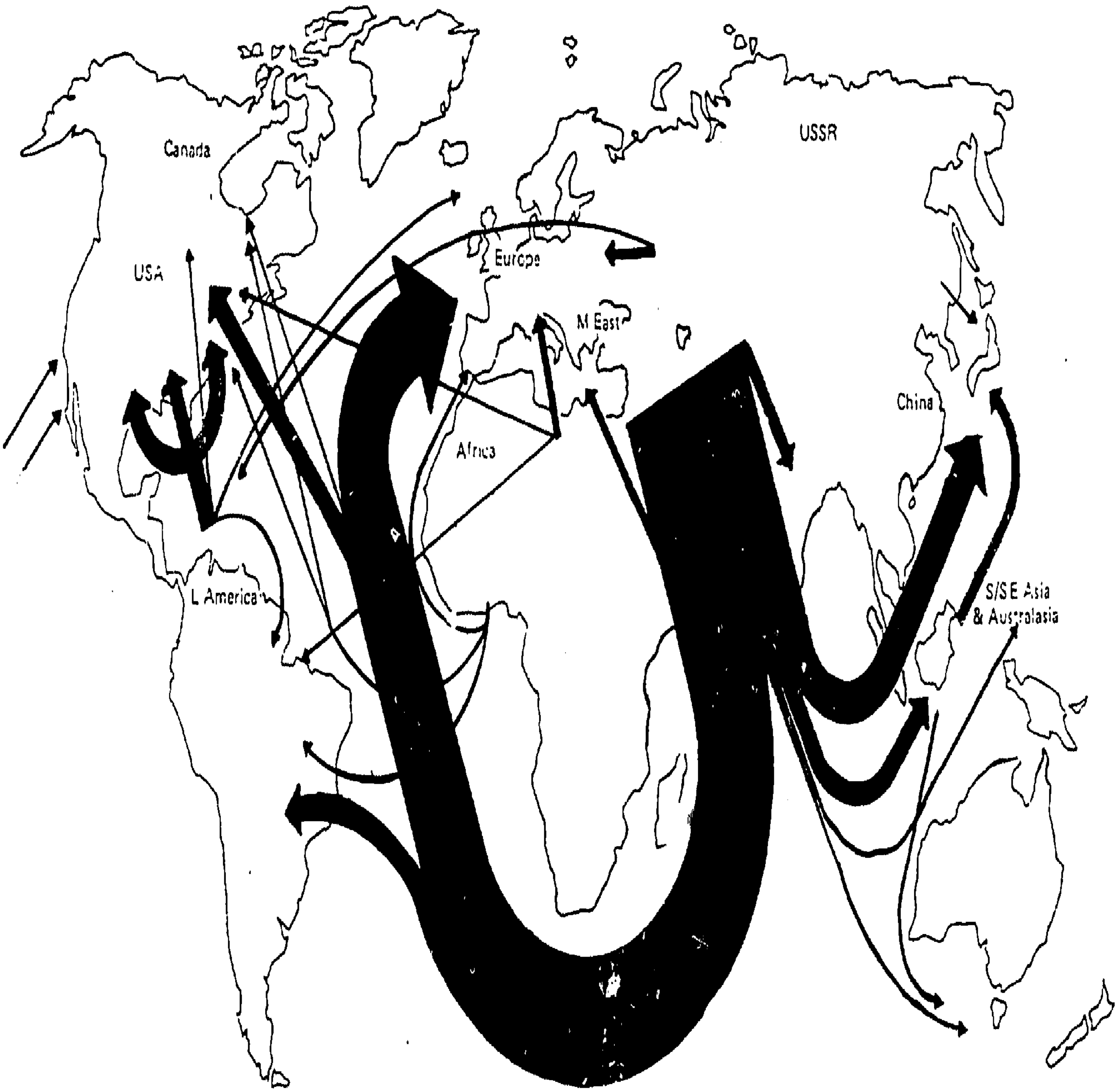
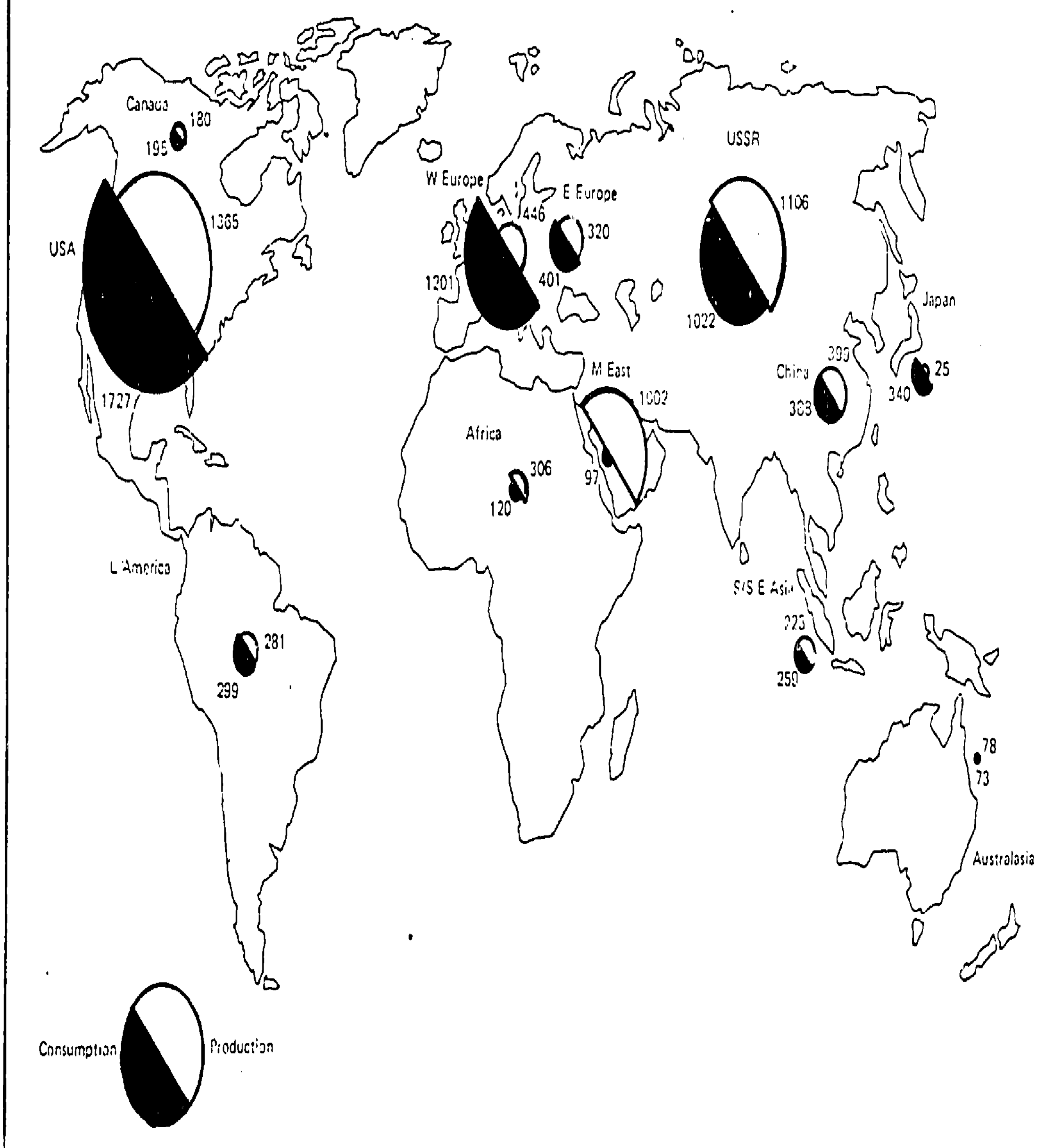
THE MOVEMENT OF CRUDE OIL IN WORLD TRADE



WORLD ENERGY PRODUCTION AND CONSUMPTION



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THE ENERGY CRISIS OF THE 70's

Many people view the Middle East war in October, 1973, and the subsequent oil boycott of the United States by several Arab producers (who formed a group called OAPEC with A standing for Arab) as the beginning of the oil crisis. Actually, the dam had already burst. In reviewing the longer-term and more fundamental causes of the energy crisis, we can probably list four reasons:

(1) The fact that global oil production reached, in the early 1970's, what is called the "inflection point." That is, the point at which the rate of annual production increases begins to decline, even though production itself continues to increase.

(2) The United States reached the peak of its domestic production curve about 1970 and entered the world market as a consumer with a vengeance in the 1970's, competing with all other importers.

(3) Global economic growth in the 1960's was at an all time high rate and therefore added considerably to overall energy demand.

(4) OPEC, or at least certain of its members, reached a point of economic strength where it could afford to restrict production to support higher prices.

The birth and growth of OPEC was a major underlying factor in the energy crisis of the 1970's. The creation of OPEC in 1960 was the culmination of a drive by the oil-exporting countries to gain control over the exploration, pricing, and selling of its oil away from the major oil companies. As the demand for oil rose during and after World War II, the opportunity manifested itself, and Venezuela took the initiative in 1948. Throughout the history of agreements between the oil companies and the oil-exporting countries, the latter had always received a fixed price for a barrel of oil, usually between 20 and 25 cents, despite the price of oil, with the remainder of the profits going to the oil company. In 1948 Venezuela forced the companies doing business there to agree to split the profits evenly, an arrangement known as the "50-50 agreement."

This opened the door and the other countries quickly followed. More and more pressure was applied because the oil companies still controlled pricing and production. For those oil-exporting countries whose government revenues came primarily from oil profits, this was an

unsatisfactory situation. When Exxon reduced its prices in August 1960 because of a glut on the market, the oil-exporting countries had had enough and formed OPEC, the Organization of Petrole Exporting Countries in November 1960. The original members were Iran, Iraq, Kuwait, Libya, Saudi Arabia and Venezuela. Seven others subsequently joined (Qatar, Indonesia, United Arab Emirates, Algeria, Nigeria, Ecuador, and Gabon). Thus its purpose was to obtain stable prices and to acquire a greater measure of control over oil production.

Increasing OPEC Power

OPEC gradually began to assert the authority of producer countries. That process greatly accelerated in 1970. In September, Libya was able to impo terms on Occidental Petroleum and achieve an increase in posted oil prices. In February, 1971, the OPEC countries reached the Teheran Agreement to raise prices cooperatively. The international majors began to lose pricing control. OPEC did it again in Tripoli in August. In October, 1972, OPEC went beyond pricing control and announced a participation agreement whereby producer countries could purchase 25 percent of their domestic oil industry, rising gradually to 51 percent. Iran went well beyond this in May, 1973, and nationalized oil. In August, Libya nationalized 50 percent.

The early success of OPEC has so strengthened the economic position of many members that even significant drops in sales would pose no threat. In fact, the opposite problem has arisen. Revenues have been so great that many members seek further reductions in output, in part to provide some relief from the economic burdens and possible social turmoil accompanying the tremendous additional income.

The Middle East War

When the Middle East War erupted in 1973, the Arab oil producers were in a strong position to respond to Western support for Israel with a boycott. The restriction of supply also firmed the market and helped support the subsequent doubling of oil prices by OPEC. While earlier oil price increases had been relatively minor, the new price increase clearly indicated that a new reality existed in world energy markets. With that demonstrated, OPEC members confidently increased the price of oil from around $4 per barrel in 1970 to $40 for certain types of crude in 1979.

Elasticity and OPEC Success

OPEC is a cartel, that is, an organization of the primary exporters of a particular product. A cartel's success or failure depends upon important market characteristics. In general, demand elasticity should be low.

That is, consumers should reduce consumption by only a fraction of a percent for each percentage increase in price. In the case of an oil cartel, this means that overall energy demand should be relatively unresponsive to prices and that oil demand as a portion of energy demand should also be quite unresponsive -- consumers should not be easily able to do without energy or to substitute other energy forms for oil. Also, supply elasticity should be low. That is, non-cartel producers, both of oil and potentially competing energy supplies, should not be able significantly to raise production and thereby undercut the cartel. In the case of OPEC, these conditions were met in the early 1970's and continue to be met today. All the elasticities have been low. There is, however, great debate and uncertainty among economists and energy experts about the magnitude of these elasticities in the longer run. Although short-run supply elasticities, or responses to price, may be low, in the longer run whole new energy systems (synthetic fuels, oil shale, tar sands, solar, even fusion power) may mean elasticities are much higher. The same is true on the demand side as the long process of transforming transportation systems and even urban designs works itself out.

Still other factors underlying cartel success or failure lie in the character of cartel members and their pattern of interrelationships. OPEC contains members who urgently need additional revenues for economic growth (especially Indonesia, Gabon, and Ecuador, but also Nigeria, Algeria, Iran, and Venezuela) as well as members who have no immediate need for much of the revenue they obtain (like Saudia Arabia, Kuwait, and the United Arab Emirates, and to a lesser degree Libya and Iraq). The revenue absorbers in the first category cannot afford to cut back production in case external demand falls, whereas the savers in the second category can. The mere existence of the second category is of great value to a cartel (CIPEC, the international copper cartel, has no such members). Relatively greater power is wielded by this category of members, and much depends upon their political relationship with other members. All else being equal, no member has any interest in damaging the cartel; but a number of issues, from the status of Israel to superpower conflict, can also enter into member decisions. So too, of course, can long-standing conflicts such as that which erupted into war between Iran and Iraq.

Overall, the coherence and power of OPEC appears very great. Many experts would argue that this is in fact desirable because of the important difference between the current energy system transition and earlier ones. The transitions from wood to coal and from coal to oil did not occur primarily because of growing scarcity of the former fuels, but because of the greater attractiveness of the latter. As long as OPEC can maintain the price of oil at what appears to be an artificially high level relative to a free-market price, the cartel creates a clear economic incentive for conservation and the search for alternative energy sources.

The Economic Consequences of Energy Scarcity

It has long been recognized that economic growth is tied to growth in energy usage. Specifically, on a global average, every 1% increase in gross world product has been accompanied for many years by a little more than a 1% increase in global energy consumption. Countries in the process of rapid industrialization (e.g., China, Taiwan, South Korea, Brazil) require significantly more than a 1% increase in energy availability, in fact as much as 2% more energy to achieve 1% economic growth. Rapid industrialization emphasizes transportation systems and energy-intensive heavy industry. Economies which are already industrialized (e.g., the United States, Great Britain, France) generally require slightly less energy growth. Specifically, for the 1960's the United States needed about 85% additional energy for each 1% economic growth. For the countries of Western Europe, Japan and the United States taken together, the figure was 1.13%.

Lower Growth Rates: The reduced growth rate in global energy supplies since 1973 has had two consequences. First, it has reduced economic growth. Whereas the Western countries grew at an average annual rate of 4.8% between 1951 and 1973, they grew at only 3.8% from 1975 to 1979. Most forecasters foresee even slower economic growth in the 1980's, in large part because of lower growth in energy supplies (higher oil prices essentially are equivalent to lower supply growth because users can buy less). However, second, reduced energy growth has also begun to break the global one-to-one, energy-to-economic growth linkage. The United States is now using about .7% of additional energy for every 1% economic growth. For all the Western countries, the ratio has dropped to .81%. The experts really do not know the degree to which the two growth rates can be decoupled. Opinions vary from somewhat more than we have already to a complete stabilization of energy consumption in the United States with no significant effect on economic growth through the end of the century.

The discussion of the growth penalty of energy prices has been quite abstract. It can be made concrete by considering the agricultural sector. The so-called "Green Revolution" of high-yield agriculture is founded on the use of natural gas or other energy-based fertilizers with new grain strains (also other agricultural inputs). During the 1970's agricultural production per capita actually fell in Africa and did not advance in South Asia. Only imported food maintained dietary levels. The price of fertilizer to a poor farmer is not abstract. The transition to a United States-style agricultural system in which more than six times the food energy output goes into food production, may never occur in most LDCs. The per-capita energy bill for the entire food chain in the United States is four times the total per-capita energy use in South Asia.

Inflation: Growth is by no means the only economic issue. The rise in energy prices has accompanied and partially explained the global inflation of the 1970's. However, that inflation was underway before 1973, so energy is not the only culprit. The Johnson Administration (1963-1968) refused to pay for the Vietnam War by cutting other (e.g. Great Society) expenditures. The greater amount of money pursuing goods and services in the United States pushed up prices. Much of this money moved abroad as the United States ran inflated balance of payments deficits (and even, by 1972, trade deficits) so that we exported inflation. The rapid global economic growth of the 1960's put pressure on raw materials supplies of various kinds, fueling inflation. The agricultural failures of the Soviet Union, South Asia, and North Africa in 1972-1974 also had an impact on prices. Although global inflation cannot be blamed exclusively on energy, it is a major factor. Because energy, like food, whose prices have also risen in the decade, is a necessity, this inflation particularly hurts the poor of the world.

Recession: Unemployment has resulted both from relative energy scarcity and higher prices and from governmental efforts to control inflation by accepting (on behalf of a portion of their populations) higher unemployment levels. Unfortunately, the trade-off between the two evils has not worked in the 1970's the way it had earlier, and the result has been "stagflation:" unemployment and inflation. There is growing speculation, however, that in the longer run higher energy prices might reduce unemployment as industries substitute human labor for energy. At this point, however, it is an open question as to whether energy and labor are substitutes or complements.

American Response to the Crisis

The "energy crisis" was no surprise to many energy experts who had been comparing demand and supply trends. In 1973, Congressional Quarterly published a perceptive review of the situation titled Energy Crisis in America. But these events did come as a surprise to the public and its leaders. In November 1973, President Richard Nixon responded to the Arab boycott by announcing Project Independence, declaring American intent to eliminate oil imports by 1980. The Federal Energy Office was created to alleviate temporary shortages and was succeeded by the Federal Energy Agency.

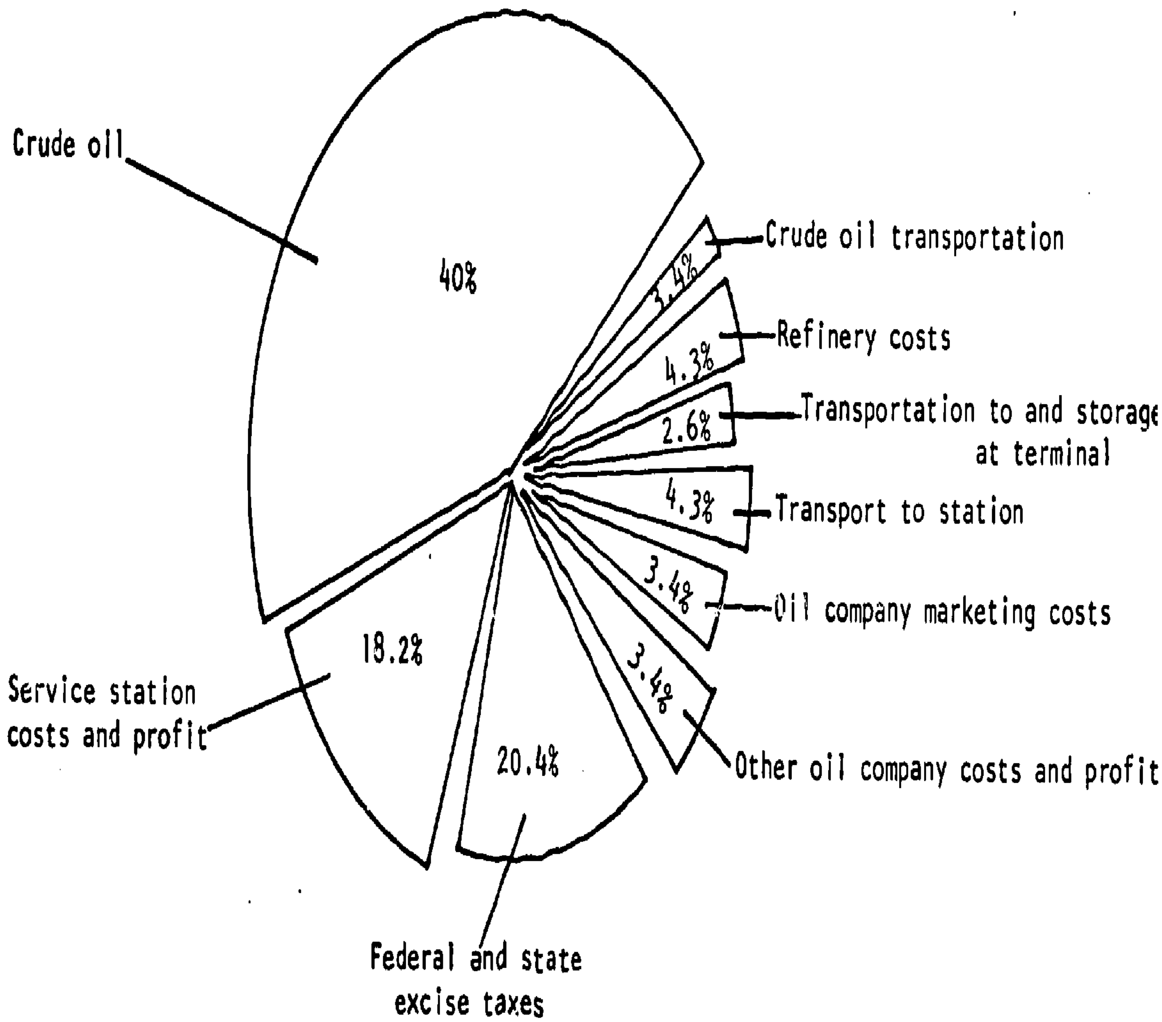
By 1975, the more fundamental nature of the situation was clearer; and in October, President Gerald Ford created the Energy Research and Development Administration (ERDA) to attack the technological and economic root issues. Early in President Jimmy Carter's Administration, the perception of the problem changed still more and the rhetoric escalated. In April, 1977, he went before the public to say:

> Tonight I want to have an unpleasant talk with you about a problem unprecedented in our history. With the exception of war, this is the greatest challenge our country will face in our lifetime . . . This effort will be the 'moral equivalent of war.'

Carter subsequently announced the most ambitious proposals yet. The results were the creation of a Department of Energy and the 1978 Energy Bill, which launched a broad attack on the problem especially from the conservation side. It included phased deregulation of natural gas prices and was followed in 1979 by a Presidential decision to phase out oil price controls first installed in 1973. Those controls had protected American consumers to a degree from the major increases in global oil prices but had also slowed the normal economic responses to it (conservation, substitution, and higher production).

United States oil imports in volume terms have roughly stabilized since 1977, after dramatic increases in the 1970's up to about 50 percent of total United States consumption. But in 1979, partly as a result of political disturbances in Iran which interrupted the oil flow, prices (which had in real terms slightly dropped since 1974) doubled again. The Iran-Iraq war and the interruption of supplies it caused has contributed further to an upward price movement. OPEC trade surpluses, which had fallen from $65 billion in 1974 to $5.5 billion in 1978, approximated $40 billion again in 1980.

FROM WHENCE THE COST OF A GALLON OF GAS



ANALYZING THE EFFECT OF OPEC PRICE INCREASES

WORKSHEET

1. The OPEC ministers, meeting in Vienna, have decided to raise the price of the average barrel of gasoline by $5.00. If that price increase is passed on to consumers penny for penny, and if only the price of the crude oil itself were affected, how much would the price of the average gallon of unleaded gasoline rise? (Refiners get 42 gallons of unleaded gasoline per barrel of crude oil).

2. If gasoline was $1.20 before the price increase, what would it be now? How would the percentage of the price explained by the cost of crude oil (on the pie chart) be affected?

3. In fact, the effect of OPEC decisions is not so easily calculated.

   (a) Competition in the market might keep oil companies or service stations from raising their prices much as the crude oil increase. Certain "cost factors" (slices of the pie chart) would be affected by this. Which cost factors would be affected and what would happen to them?

   (b) If the cost of crude oil, and of gasoline, were to increase, however, certain other costs involved in getting gasoline from the oil well to the gas pump would be affected. Which cost factors on the pie chart would be affected? Would increases in these cost factors change the <u>percentages</u> in the pie chart?

4. The United States has imported about 2 billion (2,000,000,000) barrels of oil annually since 1979. How much extra money would go out of the country every year if the price of crude oil were raised by $5 per barrel?

5. Actually, the outflow of money might be somewhat lower. Why would you expect it to be lower?

6. Gasoline prices have increased from around $0.30 per gallon in 1971 to around $1.20 per gallon today. Estimate the price of a barrel of crude oil at each price. Remember, you get about 42 gallons of unleaded gasoline from every barrel of crude oil. But the cost of the crude oil is only a part of the cost of the gallon of gas!

7. Americans are conserving gasoline. This has been caused by increases in the price of gasoline and by public attitudes toward the price increases. Assume you are a decision-maker in Washington or the state capital. You want to increase conservation even more. What "cost factor" within the pie chart might you change to do this? How would you change it and by how much? Remember, gasoline now costs about $1.20 per gallon.

   Hint: Solve this problem by deciding how much gasoline should cost in order to increase conservation. Then decide how much you must raise the "cost factor" you have control over in order to reach this target price.

8. The average American uses around 770 gallons of gasoline for transportation per year. If the price of gasoline went up to the price you planned in the last question, how much would the average person's annual gasoline bill be? How much is it now at the current price of around $1.20 per gallon? How much would it be at the 1971 price of about $0.30 per gallon?

ECONOMICS	DEPENDENCE IN THE GLOBAL ECONOMY: NATURAL RESOURCES AND INTERNATIONAL CARTELS

DURATION: Approximately two class periods

PURPOSE To introduce students to the concept of dependence and to the perspective on dependence shared by many within less developed countries.

OBJECTIVES: Students will:

(1) Define dependence, interdependence, and independence;

(2) Identify countries which are economically dependent and countries which are not, on the basis of statistical data;

(3) Identify how dependence affects political relationships between governments;

(4) Identify the reasons why the oil cartel succeeded and the coffee cartel did not.

BACKGROUND INFORMATION FOR TEACHERS:

For many countries, integration into the international economy can be a mixed blessing. In the United States, for example, our economic interdependence limits the ability of the government to control inflation and raise employment. Competition from Japanese and other manufacturers has forced painful adjustments in the economy as workers are forced to find new kinds of employment.

Dependence

For less developed countries the effects of integration into the international economy can be even more severe. Most less developed countries by definition have relatively few strong industries. These few industries make up a disproportionately large share of the economy. Decisions or economic changes which affect them thus have a disproportionately large impact on the country's economy as a whole. They can also have a large impact on the government's development plans which are pegged to these larger, stronger money earners.

When a less developed country's strong industries are largely oriented toward the foreign market (i.e., toward exports), decisions and economic changes in other countries can have a disproportionate impact on the exporting country. The less developed country may even become dependent on a single other country to which it sells its products.

The Types of Economic Dependence

One country can become economically dependent on one another in three ways. It may become "trade dependent" (i.e., dependent on trade with the other). It may become "aid dependent" (i.e., dependent on financial aid from the other). Finally, it may become "investment dependent" (i.e., dependent on the other for new capital investment or dependent on the other because of high foreign ownership of key industries). These types of dependence are more fully described in the attached reading "Talking About Dependence."

Of the three forms of dependence, "trade dependence" is the most complicated. A country can only be trade dependent if (1) its exports and imports make up a large share of the country's overall gross national product (i.e., the total value of goods and services produced by the country's people), and (2) a large share of its exports go to a single foreign country.

When a country is economically dependent on another, it can be highly affected by decisions or actions taken by the other. For example, the Dominican Republic is trade dependent on the United States. It depends on the sale of sugar to the United States for a large share of its national income. Development plans of the Dominican government depend on the taxes placed on sugar growers and sugar exporters. Private investment depends on profits made from sugar. Thus when sugar beet growers in North Dakota and Ohio ask for and get more restrictions on sugar imported into the United States, the Dominican Republic is highly affected.

The Political Effects of Economic Dependence

If has been argued that economic dependence over a long time can have very drastic effects on a country. The situation described above suggests, for example, that an economically dependent country can become less independent politically. The government of the Dominican Republic might curry favor with the American government by voting its way in the UN or the Organization of American States or by not arguing against its support of rebels in Nicaragua or the government of El Salvador. Then when sugar beet growers in the midwest ask for a more restricted policy, the Dominican government can ask for "favors" in return.

The Economic Effects of Economic Dependence

Long-term economic dependence may also have economic effects. It has been argued that dependence leads to "distorted economies." Foreigners have an impact on the country's development, especially through aid or investment dependence. They are likely, however, to make decisions in their own self-interest, or the interest of their country. Most importantly, they are likely to make decisions which r[illegible] in greater, not less dependence or which favor industries of [illegible]e to the foreign country.

For example, Nigeria has been the recipient of much foreign development aid. That aid has gone largely to manufacturing or to large scale export agriculture--to grow cocoa, coffee, etc. for sale to wealthier countries. Very little aid and few economic incentives have gone to small farmers who grow food for Nigerians to eat. By 1990 Nigeria may as a result spend all its oil revenue just to buy basic food for its people--food which could be grown in Nigeria.

Trade dependence can lead to "distorted economies" by encouraging dependence in a few key export industries as well. As long as the market for these few products holds up, the investment will be a wise one. But dependence is increased and when there are recessions in the importing country or soft markets for these particular goods, the less developed country can suffer. Likewise, such specialized investments tend to favor some people (e.g., the coffee growers) consistently over others (e.g., the food growers). As a result, great gaps between rich and poor, between small farmer and big farmer, and between small businessman and large businessman can result. These gaps can lead to conflict and even tear the society apart in the long run.

Conflict in the International Arena

The economic effects of dependence can in the long-run change the political relationship between the dependent country and the country on which it is dependent. As conflict grows, rather drastic changes in the government can occur (e.g., Castro's rise to power in Cuba, the Allende government in Chile). These new governments may attribute many domestic problems to the dependence relationship. They may thus rebel against it--regardless of the economic cost.

In less extreme cases, the dependent government may simply go out of its way to emphasize its political independence and sovereignty. It may also go out of its way to reduce its dependency. Thus in the short-run dependence can lead to political submissiveness. But in the long-run it can lead to conflict between countries.

Student Learning

In this lesson students are introduced to the concept of dependence and to the types of economic dependence which have been identified by scholars within the less developed world. Since the very concept of dependence was first articulated in Latin American, and has much relevance to understanding relationships between Latin America and the United States, the examples of dependence used in the lesson are drawn from that region.

Students also see how the move toward cartels, and by implication the New International Economic Order have been responses to the existence of economic dependence. They see the limits of the cartels as a response, and the reasons why, despite the success of OPEC (the oil cartel) most commodity cartels have not been and are not likely to be highly successful.

MATERIALS: The background reading "Talking About Dependence," the student reading "Coffee and Oil: What Can You Do About Dependence?" and the small group data sheet "Latin America: How Dependent?"

VOCABULARY: Dependence, interdependence, independence, trade dependence, commodity dependence, cartel, substitutes, industries, distortion.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: Introduce the lesson by noting that natural resources often provide the basis for a less developed country's involvement in the international economy.

Have the students identify natural resources which are the basis of Latin American exports (e.g., land and climate--bananas from Central America, coffee from Central American, Colombia, Brazil; grain from Argentina; mineral deposits--copper from Peru and Chile, tin from Bolivia).

Step 2: Explain that for many less developed countries the industries based on natural resources can become the single largest part of the economy. And because these products are for the most part exported to the richer countries, dependence on them can lead to dependence on other countries.

DEVELOPING THE LESSON

Step 3: Define "dependence" for the class and contrast it to "interdependence" and "independence."

Have the students suggest some appropriate examples of each relationship. For example:

Dependence: Child's dependence on Parent
Addict's dependence on Pusher
Japan's dependence on OPEC oil

Interdependence: Friends
U.S. interdependence with Europe (trade)
U.S. Interdependence with the USSR (security)

Independence: God creating the universe
A hermit

Step 4: Define and discuss trade, aid and investment dependence as outlined in the background reading "Talking About Dependence," You may want to make students aware of the other types of dependence as well.

Discuss briefly the political and economic effects of dependence. (See the Background Information for Teachers.)

Step 5: Divide the class into groups of four or five students each.

Give each student or each group a copy of the data sheet "Latin America: How Dependent?" Then give each group a copy of the small group questions or project a transparency of the questions so that all the groups can see them.

Have the groups answer the questions during the remainder of the period.

Step 6: At the end of the class, assign the article "Coffee and Oil: What Can You Do About Dependence?" as a homework reading Assignment.

DAY 2: CONCLUDING THE LESSON

Step 7: Have the small groups complete their work from the previous day if necessary.

Step 8: During the remainder of the period, discuss the small group work and the homework reading assignment with the class. You might use the following as a guide:

1. Are most of these Latin American countries trade dependent? Which are not? Are only less developed countries trade dependent according to the table?

2. Upon which countries do these dependent countries depend? Might this help explain relations between the United States and these countries? How?

3. Are these countries commodity dependent as well? On which commodities generally?

4. Do you think that the dependence on just a few commodities in the region encourages cooperation or conflict among these countries? Why? How does the experience of the coffee cartels in last night's reading support this?

5. Besides creating a cartel, what else does the article you read last night suggest that a country might do to lessen its dependence? How useful are each of these suggestions? Why might it be hard to export your products to more countries?

6. Which of the major oil exporters and which of the major coffee exporters were trade dependent? Which were commodity dependent on coffee or oil? Which group was more dependent...the coffee exporters or the oil exporters?

7. What reasons are given for the success of OPEC in contrast to the coffee cartels? Does the article seem to suggest that most cartels will end up successful like OPEC or unsuccessful like the coffee cartels?

TALKING ABOUT DEPENDENCE

BACKGROUND FOR TEACHERS

Dependence and interdependence are concepts which can help students understand certain international events and issues. The concept of dependence has become particularly important to political scientists. It has become widely used to describe and understand relationships between less developed countries, and more developed countries, particularly between Latin America and the United States and between former colonial areas in Africa and Asia and their former colonizers. In fact, dependence theory has its origins in the thinking and writing of Latin American scholars.

Defining Dependence

Dependence means that a country, or an individual or group, has some objective or goal which cannot be obtained except through the willing cooperation of other countries, individuals or groups. For example, the Japanese are dependent on Middle Eastern oil producers for the energy which powers their industries. A dope addict is dependent on his or her pusher for a "high." And the public schools are dependent on the taxpayers for their very survival.

Dependence is most important when the objective is a critical one or when a country or individual is dependent on another country or individual for a wide range of objectives. Young children, for example, are dependent on their parents to fulfill virtually all their needs. When a particular country is economically dependent on another in critical ways or to a high degree, they may become politically dependent as well. Thus, it is argued that Latin American governments have typically taken the reaction of the U.S. government into account whenever they make decisions.

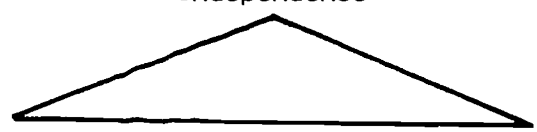
Dependence, Interdependence and Independence

Dependence may be unbalanced, like a young child and his or her parents, or it may be relatively balanced. If it is balanced the relationship is called "Interdependence." The relationship between most friends is an interdependent one. They need each other to obtain desired goals (e.g., acceptance, commaraderie). But they both need each other equally.

Interdependence has its own set of problems, but it is not considered as much a problem politically as dependence. When a person or country is dependent upon another, the dominant country or person can take advantage of the dependent country or person, up to a point. Generally speaking, it is less likely that interdependent countries or people will

be able to take advantage of one another, at least not over a period of time. They may take advantage of each other now and then. But things balance out because neither has real power over the other. Both would be equally hurt if the relationship were to end.

Dependence and interdependence should probably be thought of as corners on a triangle rather than the ends of a straight line or continuum. The third point on the line is independence or autonomy. When an individual, group or country need not take others into account when making decisions, when they do not need others to obtain their objectives, they are independent. Actually, complete independence is as rare as complete dependence or perfect interdependence.



Types of Economic Dependence

In thinking about dependence between countries, it is seldom useful to think in those general terms. Very few if any countries are dependent on another country to the extent that a child is dependent on his or her parent. So in talking about and in measuring the dependence of countries it is necessary to think in more limited terms. Various terms of economic dependence have been considered important: (1) trade dependence, (2) commodity dependence, (3) aid dependence, and (4) investment dependence.

Trade Dependence. If a country is very actively engaged in international trade, economists say that the country has an "open economy." An example of an open economy is the Netherlands. The Dutch derive about one-half of their annual Gross National Product (GNP) from trade with the rest of the world. Countries with open economies can be more or less dependent upon trade. Their degree of trade dependence is indicated by the sum of imports plus exports divided by their total GNP. If this figure is over 20%, the country can be said to be dependent on trade.

Note that we have not said that the Netherlands is dependent upon trade with any particular foreign country. If a country is trade dependent, and much of its trade is with a single country, we can say that the former country is trade dependent upon the latter.

Aid dependence can also arise when a country badly needs a product or commodity which it cannot afford to purchase. This situation can arise as part of a major development project (nuclear generating plant, for example). But the most distressing case is clearly the need of certain countries for imports of food which they cannot afford. Food aid dependence probably exists between India and the United States. It certainly exists between Bangladesh and the outside world.

Investment Dependence. Private foreign investment has made an important contribution to economic growth in many countries. But it has also brought economic problems. Countries which have a substantial foreign ownership of their businesses are often concerned about the influence of such multinational companies or the governments of the countries in which the multinationals are headquartered. Foreign ownership of the manufacturing sector or the extractive and processing sector of the economy could be an indicator of investment dependence. Alternatively, the ratio between new foreign investment (plus retained earnings) and overall domestic capital formation is a good indicator of investment dependence. One should also ask whether the multinational firms are headquartered in a single foreign country. On most of these variables, Canada appears to be dependent upon United States investment. That dependence has also become a major political issue in Canada.

Foreign investment may also be concentrated in a particular industry. If that industry is vital to the economic well-being of the country, and if the investor is a single, large multinational corporation, the country may become dependent on that corporation. The relationship between Guatemala on the United Fruit Company may represent this form of investment dependency.

Other Forms of Dependence

While the focus of this lesson is on economic dependence, scholars have also identified two other important forms of dependence. Some countries, for example, are militarily dependent. Alliances are typically signs of military interdependence. But if one country imports most of its military equipment or if it depends on foreign military aid or even foreign help in training its armed forces, it can become militarily dependent.

Many former colonies also find themselves in a position of cultural dependence. The language of the former colonizer may be the most common language among the government and business elite. Many of the young people may receive college educations abroad, particularly in the former colonizing country. Finally, the modern communications media of less developed countries may be dominated by programming from the developed world. Television shows, news media, movies, the recording industry may all transmit ideas and images of strength and wealth from the developed world to the exclusion of domestically produced programming. This can threaten both the cultural heritage and the special cultural development of the country.

Adapted from: George A. Lopez. "Dependence and Interdependence in the International System," Field Test Edition. Learning Packages in International Studies. Columbus, Ohio: Consortium for International Studies Education, 1979.

Coffee and Oil: What Can You Do About Dependence

When a country is trade dependent on another, the government of the dependent country is usually interested in changing the situation. That is more easily said than done, however.

There are three ways in which a government can lessen its dependence on another. First, it can reduce or eliminate trade with the other. This is very costly, of course. The government will loose taxes. There will be less foreign money to buy things abroad which the country needs.

Second, the government can try to diversify, that is add to the number of countries to which it sells goods. This can be difficult if there are many other producers of the goods the dependent country has to sell. It can also be difficult if the country depends on corporations from its "top dog" country to market its exports.

Finally, the country can get together with other countries which sell the goods it produces. These countries can form a cartel and try to set the price they charge for their commodity. The idea of a cartel is not to lessen dependence, at least not in the short-run. It can, however, lessen the effects of dependence.

Since the cartel, if it is successful, controls the vast majority of the goods traded internationally, countries are less dependent politically. The government needs not worry as much about pressure from the "top dog" country to follow its lead on international issues. By controlling prices, the cartel can also avoid problems which rising and falling prices create for it. A steady price with predictable tax revenues, means steady, predictable development planning for the government. Finally, by controlling prices, the cartel can get more money for its goods than it would otherwise get. This money can be used to diversify the economy, thus lessening dependence in the long-run.

Not all cartels work, however. In fact very few do. The reasons why can be seen in the different experience of oil and coffee producers. The oil cartel has worked for the most part. The coffee cartel has not.

The Oil Exporting Countries

Not all countries with large reserves of oil are oil exporters. Industrial countries with oil reserves, like the United States and the Soviet Union, do not usually export much oil. They expect to use all their oil reserves within a few decades.

The principal oil exporting countries either have a relatively small population (e.g., Saudi Arabia), or they have a large population but are not yet industrialized (e.g., Indonesia). Therefore, they do not need much of their oil reserves for domestic consumption.

Because some countries with large oil reserves cannot afford to export oil, the number of major oil exporters is fairly small. When OPEC first began to raise oil prices, five countries controlled well over 50% of the world's oil exports. The five were Saudi Arabia (18%), Iran (15%), Venezuela (9%), Kuwait (7%) and Libya (6%).

As Table 1 shows, four of these five were clearly <u>trade dependent</u>. (Kuwait was probably trade dependent as well. The United Kingdom was probably its largest customer.) All five of these countries depended on trade for over 20% of their gross national product (i.e., the total value of goods and services produced in the country.) With the possible exception of Kuwait, they also sold over 20% of their total exports to a single country.

All five of these countries were also <u>commodity dependent</u>. They each depended on a single commodity for over 30% of their total exports. In fact, these five countries depended on oil for over 90% of their total exports!

Table 1

The Trade Dependence of Major Oil Exporters (1969-71)

	Total Exports / GDP	Trade With Principal Partner	Oil Exports / Total Exports
Saudia Arabia	67%	Japan (25%)	93%
Libya	64%	Italy (23%)	99%
Venezuela	28%	USA (36%)	92%
Iran	27%	Japan (28%)	91%
Kuwait	59%	Not Available	96%

OPEC and Oil Prices

OPEC, the Organization of Petroleum Exporting Countries, was created in 1960. It was not until after 1969, however, that oil prices started to increase. In 1969, Colonel Muhamar Quaddafi overthrew King Idris of Libya. Quaddafi reduced production and demanded higher prices. When the oil companies caved in to the demand, OPEC nations learned of the power they had.

In late 1970 oil was still bringing only $1.25 a barrel. It was privately agreed that this price did not really reflect oil's economic value. It was particularly unrealistic for a finite resource, that is one which would one day run out. In part, Western prosperity after 1945 was financed by cheap oil.

In 1974 by contrast, the price of OPEC oil averaged $11.65 a barrel. This was four times higher than the 1973 price and eight times higher than the 1970 price. OPEC nations earned 106.5 billion dollars from oil sales in 1974 versus 28.4 billion dollars in 1973. OPEC had turned dependence around. Although they depended more than ever on oil for their development, these countries were now in control of the price they could charge.

The Coffee Exporting Countries

Coffee is consumed by one-third of the world's people. It is the world's most popular prepared drink. The exact taste of a given coffee is determined by the environment in which it was grown. All coffee trees require deep, rich, well-drained soil and an annual rainfall of 60-120 inches. Coffee cultivation is labor intensive. Coffee trees do not tolerate freezes or prolonged direct sun. They grow best in uplands of a tropical savanna climate.

Coffee is grown primarily in less developed nations for consumption in wealthier countries. World production centers in Latin America and Africa, Brazil produces 40% of the world's total. All African nations combined grow 30% of the total. In Latin America, the top five producer nations (in order) are Brazil, Colombia, El Salvador, Guatemala, and Mexico. In Asia and Africa, the major producers (in order) are the Ivory Coast, Angola, Uganda, Ethiopia and Indonesia. Most of the coffee grown is traded internationally. In 1900, world trade in coffee was one million tons. In 1970, coffee trade totaled three and a half million tons. After oil, it is the second most widely traded commodity in the international market.

Among the chief coffee exporting countries, only Brazil and Mexico were not <u>trade dependent</u>. These two countries alone did not depend on trade for over 20% of their Gross National Product. Yet, each of these coffee exporting countries did depend on a single foreign country as a market

for its exports. All of the trade dependent countries [illegible] also commodity dependent. They each depended on coffee for at least 30% of their total exports. Yet, their dependence on coffee was much less than the oil exporters dependence on oil.

Table 2

The Trade Dependence of Major Coffee Exporters (1969-71)

Country	Exports + Imports / GNP	Trade With Principal Partner	Coffee Exports / Total Exports
Mexico	13%	USA (65%)	6%
Brazil	14%	USA (26%)	29%
Columbia	23%	USA (42%)	49%
Guatemala	30%	USA (28%)	34%
El Salvador	51%	West Germany (22%)	46%
Ivory Coast	61%	France (31%)	30%

The ICA and Coffee Prices

In 1962 the International Coffee Organization was established as the result of an International Coffee Agreement signed by both importer and exporter nations. The ICA's purpose was to stabilize prices by restricting production. Still, prices changed frequently. In 1971 after the U.S. dollar was devalued, the International Coffee Agreement was allowed to lapse. The ICA became little more than a data collection agency.

But in 1973-74 the producer nations moved to set up a series of cartels to stablize and hopefully maintain high prices. The Inter-African Coffee Organization agreed to withhold coffee from the market to keep supply in line with demand. A cartel called Other Milds was established among Central American producers. Cafe Mondial, Ltd. or World Coffee was established by the four major coffee producers, Brazil, Colombia, Ivory Coast, and Angola. Together, these cartels controlled about 80% of the 4.5 billion dollar international coffee trade.

To demonstrate their collective interest, members of these cartels agreed to supply 52.[illegible] million bags of coffee for the 1973-74 market. Demand was estimated at 56.5 million bags. With demand higher than supply, it was thought prices would be stable or rise. In 1974, however, prices fell about 10%. Many producers began to act independently. The coffee cartels found they could not maintain discipline and control the price of their commodity.

Why Oil and Not Coffee?

The reason why the oil cartel succeeded and the coffee cartels did not probably rests on the two basic differences between the two.

Coffee and oil are very different in terms of the degree to which people can substitute other commodities in their place. When coffee prices are high, people can drink tea or other beverages. When oil prices rose, Americans found that in the short-run they could not substitute some other energy source for oil. Since 1974, however, Americans and people around the world have reduced their oil use. They are driving less, buying smaller cars, and using coal and other energy sources for generating electricity. As a result, even OPEC has found it hard to keep prices up. They have not been able to raise prices significantly since 1980.

An important difference between OPEC and the coffee cartels also lies in the dominance of Saudi Arabia within OPEC. Saudi Arabia is the single largest oil exporter in the world--by far. While the Saudi's cannot control OPEC, they can single-handedly make it work. The Saudi's do not depend highly on current oil revenues. Their oil income is vast and their population is small. Thus the Saudis can easily restrict oil production to keep prices up. In fact it is in their interest to keep their oil in the ground. It will be worth more in the future. There is no coffee exporting country which both dominates the coffee market and does not really need the current income from its coffee exports. So the coffee cartels must depend more on <u>cooperation</u> among the coffee exporters. Since they are <u>competitors</u> in the coffee market and cooperation is risky, the cartels often break down.

Adapted from: George A. Lopez. "Dependence and Interdependence in the International System," Field Test Edition. Learning Packages in International Studies. Columbus, Ohio: Consortium for International Studies Education, 1979.

Latin America: How Dependent?

Country	Trade Dependence: (1) Exports+Imports/GNP 1972	1979	(2) Principal Trading Partner (%of Exports) 1976	1980	Commodity Dependence: (3) Principal Commodity (% of Exports)
North and Central America					
Costa Rica	54%	58%	USA(40%)	USA(37%)	Coffee(34%), Fruit (19%)
El Salvador	51	68	USA(32%)	USA(29%)	Coffee (35%), Cotton(16%)
Guatamala	31	38	USA(35%)	USA(27%)	Coffee(43%), Cotton(13%)
Honduras	51	78	USA(57%)	USA(57%)	Coffee(35%), Fruit (24%)
Mexico	11	19	USA(62%)	USA(63%)	Oil (28%)
Nicaragua	48	46	USA(31%)	USA(39%)	Coffee(31%), Cotton (23%)
Panama	44	49	USA(42%)	USA(46%)	Fruit(30%), Petroleum Products (25%)
Caribbean					
Dominican Republic	38	64	USA(70%)	USA(63%)	Sugar(30%), Coffee(16%), Cocoa(14%)
Haiti	19	40	USA(66%)	USA(58%)	Coffee(39%)
South America					
Argentina	14	24	Brazil(11%)	Netherlands(10%)	Corn(9%)
Bolivia	40	61	USA(35%)	USA(33%)	Tin and tin ores (65%)
Brazil	17	17	USA(18%)	USA(17%)	Coffee(18%)
Chile	18	44	W. Germany(14%)	W. Germany(12%)	Copper([illegible])
Colombia	22	25	USA(31%)	USA(30%)	Coffee(66%)
Ecuador	33	50	USA(38%)	USA(43%)	Oil(40%), Coffee(17%), Cocoa(17%)
Paraguay	20	25	Netherlands(15%)	Argentina(24%)	Cotton and cotton seeds(54%)
Peru	26	43	USA(26%)	USA(30%)	Copper(21%), Oil(13%)
Uruguay	18	34	Brazil(12%)	Brazil(23%)	Wool(21%), Meat ([illegible])
Venezuela	40	53	USA(38%)	USA(16%)	Oil and petroleum products (93%)
Developed Countries					
United States	9	17	Canada(21%)	Canada(16%)	Autos and auto parts(9%)
West Germany	33	42	France(13%)	France(13%)	Autos and auto parts(14%)
Japan	18	21	USA(24%)	USA(24%)	Autos and auto parts (20%)

Small Group Questions on Latin American Dependence

1. Based on the most recent data in the table and the definition of "trade dependence" you have been given, which Latin American countries are "trade dependent."

2. Which are "commodity dependent?"

3. Upon which country do most of these dependent countries depend?

4. Which two Latin American countries are becoming "top dog" countries? Which countries are becoming dependent on them?

5. According to the table, is the United States trade dependent? What about West Germany? Japan? Is dependence only a problem for less developed countries?

6. The majority of these Latin American countries are dependent on one or two commodities. What are they? Do you think this contributes to cooperation among Latin American countries or conflict? Why?

ECONOMICS

WHY BUSINESS FIRMS INVEST ABROAD: THREE VIEWS

DURATION: Approximately four class periods.

PURPOSE: To provide students with an understanding of the reasons for and the impact of foreign investments.

OBJECTIVES: The students will:

(1) describe three reasons for foreign investment;

(2) explain the impact of foreign investment on host countries; and

(3) identify evidence of different explanations of foreign inv ent in a newspaper article about an American multinational corporation.

BACKGROUND INFORMATION FOR TEACHERS:

Foreign investment can be defined as the use of funds by individuals or businesses of one country to buy or develop economic facilities in another country. Today, such investment is mostly the province of big business. Sometimes the investing firm is a large bank or other financial institution either in the United States or abroad. More frequently, international movement is undertaken by corporations with operations in several countries. These companies have come to be known as multinational corporations, and their activities have become extremely important to the world economy.

American Investment Abroad

The role of American firms in the world economy is particularly important. There were almost 3,500 U.S.-based firms with investments in other countries in 1977. These firms owned at least 10% of 23,641 affiliate companies, subsidiaries and branch firms. In 1980 the direct investment position of American firms (that is the book value of U.S. direct investor's equity in and net outstanding loans to foreign affiliates) totaled 213,468 million dollars! These corporations and their affiliates had sales of over 2 trillion dollars worldwide and employed over 26 million people.

Most of the investment of American firms abroad is in Europe $95 billion or 61% of total foreign investments). Canadian investments run a distant second ($44.6 billion -- 28%). Only $52.7 billion (or 34% of total U.S. direct private investment) was invested in the developing countries. The vast majority of these investments were in Latin America ($38 billion -- 24% of total private foreign investment).

WHY BUSINESS FIRMS INVEST ABROAD

The Growth in Foreign Investment

Investment has grown rapidly over the past twenty years. This growth can be seen in increased profits. Since 1970 the income returned to U.S. companies on their investments abroad has grown from just over 8 billion dollars to nearly $37 billion. Investments by foreign companies in the United States has grown even more. In 1970 income returned to foreign investors in U.S. firms was $875 million. By 1980 the figure had grown to over $9 billion.

Student Learning

The purpose of this lesson is to provide some insight into the basic economic motivations underlying international investment. Students review what economists and others have had to say about why firms invest abroad. The lesson also demonstrates that sometimes conflicting explanations for investment come from markedly different beliefs about how the world economy works. These differences in essentially theoretical positions lead to significantly different views on appropriate public policy toward international companies.

The lesson can probably best be used within units on the business firm or international trade. The student readings involve a variety of economic terms, and students will be better able to deal with the material after some of these terms have been introduced in the course.

<u>MATERIALS</u>: The pre-test "Your Attitudes Toward Foreign Investment," and student readings "Theory I: The Simple Profit Explanation," "Theory II: The Oligopoly Explanation," and "Theory III: The Excess Profit or Monopoly Explanation," a newspaper article "Gillette World Wide Strategy Takes Patience," and an "Annotated Bibliography" and "Vocabulary List" for teachers.

<u>VOCABULARY</u>: Corporate managers, portfolio investment, direct investment, oligopoly, monopoly, monopoly capitalism, foreign investment, tariffs, maximize profits, excess profits, host or recipient country, home country, differentiation.

<u>INSTRUCTIONAL STRATEGIES</u>:

DAY 1: OPENING THE LESSON

Step 1: Hand out copies of the pre-test "Your Attitudes Toward Foreign Investment" to each student.

Tell the students that they are going to be learning more about foreign investment during the next few days. The purpose of the pre-test is to let them express their opinions or thoughts about why firms invest in other countries. There are no right or wrong answers. In fact, students should feel free simply to mark choices which seem the most reasonable even if they have never before thought about foreign investment.

Have students complete the pre-test individually.

Step 2: When the class is finished, have each student calculate his or her attitude profile.

Have them add up all the checked answers for each of the six letters (i.e., A's, B'c, C's, D's, E's, F's). Then have them add:

(1) A+E= _______ (Category I)
(2) B+F= _______ (Category II)
(3) C+D= _______ (Category III)

While the students will probably have checked statements in each of the three categories, their answers probably cluster in one or the other. Have them decide with which category they most often agree.

Step 3: Poll the class, having students raise their hands depending on whether their choices fall largely in Category I, Category II or Category III. Write this distribution on the chalkboard.

DAY 2: DEVELOPING THE LESSON

Step 4: Explain that the differences in these categories and statements reflect differing "theories" or explanations as to why business firms invest in other countries. There are three major "theories." They are important because they each have different answers to the question of whether foreign investment should be encouraged or not.

Explain that the three theories differ to some extent on the following five points.

(1) The role of profits in explaining why firms invest abroad; and the nature of those profits.

(2) Whether firms are more likely to prefer "direct" investments, that is investments which involve controlling

or managing the foreign company, or "portfolio" investments, that is investments which do not allow the investor to gain control over the foreign company.

(3) The nature of competition between business firms in a particular industry.

(4) The impact of foreign investment on the host or recipient country.

(5) What policies host countries, especially less developed countries, should have toward encouraging foreign investment in their country.

Step 5: Divide the class into three groups, one for each of the three theories or explanations of foreign investment.

Assign one of the three theories of foreign investment to each group. Have the groups read the article describing their theory and have them discuss how advocates of that "theory" would answer each of the five questions outlined above.

DAY 3:

Step 6: When the groups have finished their work, reassemble the class and have the groups explain their "theory's" position on each of the five questions. Take each question in turn, having representatives of the groups explain their theory. Write important points on the board so that the students can readily compare differences and similarities in the three explanations.

As students give their reports, encourage them to relate the answers of earlier questions to those of later questions so the class can see the logic of the explanation.

DAY 4: CONCLUDING THE LESSON

Step 7: Explain that evidence of each of these theories is all around us, particularly in reports in daily newspapers. But sometimes it is difficult to say just what theory a particular piece of evidence best supports.

Hand out copies of the newspaper report "Gillette Worldwide Strategy Takes Patience." Have students read the article.

Step 8: Discuss with the class the evidence the article contains, if any, for each of the three theories. You might ask:

(1) Is there evidence that profits play an important role in Gillette's investment abroad? Does the description of the attitudes of Gillette's managers, as expressed in the article, best fit a simple profit, an oligopoly or a monopoly capitalist attitude toward profits?

(2) Is there any evidence of "differentiation" in the article?

(3) Based on the article, what impact is Gillette having on people in the host countries (e.g., changed life styles and cultural standards, more expensive but better technologies for shaving, less advanced technology than in the U.S. but matched to what people in less developed countries can afford)?

(4) Based on these effects, and on the theory you think best explains Gillette's involvement in the world economy, do you think these less developed countries should encourage Gillette's investments or not?

INSTRUCTIONAL OPTIONS:

Use the following lesson "Investing Abroad: A Simulation of Negotiations Between Multinational Corporations and Governments" as an additional means of reinforcing concepts learned in this lesson or as an alternative to Steps 7 and 8 of this lesson.

YOUR ATTITUDES TOWARD FOREIGN INVESTMENT

Read the following sets of statements. Then check the one statement in each set of three with which you most agree. You may agree in part with more than one, but try to select the one you agree with most strongly!

1._____ A. Most business firms invest in companies overseas because profits are higher there than at home.

_____ B. Most business firms invest overseas because they see competitors doing so.

_____ C. Firms invest overseas mostly to "corner" cheap supplies of raw material and prevent competitors' from getting them.

2._____ D. Countries should be wary of foreign investors because there is danger of losing control over domestic industries.

_____ E. Countries should welcome foreign investment because new investment always helps.

_____ F. Host countries may or may not get economic benefits from foreign investment.

3._____ A. When American firms invest abroad, they have no special advantages compared to local companies.

_____ B. Firms that invest overseas usually want to control the foreign enterprise.

_____ C. When firms invest abroad, they quickly try to reduce competition from local companies.

4._____ D. Firms investing in less developed countries usually produce luxury items from which they get very high profits.

_____ E. Tariffs which prevent companies from exporting to some countries are the primary reason for firms to invest abroad.

_____ F. Investments which introduce new products into a foreign market are more likely to be made by U.S. firms than firms from other countries.

5. _____ A. Foreign investment and foreign trade are two methods to accomplish the same end: sell products in a foreign market.

_____ B. Firms invest abroad to get access to new markets for unique products sold first at home.

_____ C. When firms invest abroad, their purpose is to dominate the foreign market.

6. _____ D. Countries should not welcome foreign investment because there is a danger of losing control over domestic resources.

_____ E. Countries should welcome foreign investment because it always contributes to employment and economic growth.

_____ F. Countries should welcome foreign investment because it often brings technology that otherwise would be absent.

7. _____ A. Much foreign investment is made by firms interested in reducing production costs through cheap labor.

_____ B. Firms invest abroad to increase their share of the world-wide market for their product.

_____ C. Foreign investment occurs because the economies of developed countries are so concentrated that they need to control sources of raw materials and other markets.

8. _____ D. Large multinational corporations agree among themselves to limit their competition for overseas markets.

_____ E. Foreign investment is just another way to sell a market that might easily be served by exports.

_____ F. Firms invest overseas because they have access to cheaper sources of capital than do foreign competitors.

9. _____ A. Firms that invest overseas typically are very similar, if not identical, to companies already operating in the foreign nation.

_____ B. U.S. companies move abroad because they usually are better managed than foreign firms.

_____ C. Companies invest in low-wage areas mostly to reduce the power of labor unions at home.

10. _____ D. Foreign investment is usually made to "take over" overseas competitors.

_____ E. When foreign investment is made in raw materials, the major purpose is simply to reduce operating costs at home.

_____ F. Firms invest overseas to help them take advantage of good advertising techniques developed at home.

THEORY 1

THE SIMPLE PROFIT EXPLANATION

According to the Simple Profit Explanation, the goal of corporate managers is to maximize their company's profits. This goal leads managers to invest in whatever activities promise to make the greatest profits. So when managers find an opportunity to make higher profits in another country, they invest in that country. If they didn't, their competitors would. Then the competitors would make more profits and have an advantage, at least for a time.

In this sense, companies are seen as having a fairly passive role in an economy. They respond to economic signals from the market, especially prices and sales. Even fairly large companies have little freedom in making decisions because of the need to remain competitive with other companies. No firm has a special advantage over similar firms in the world economy, at least not for long.

When companies find an opportunity abroad, they do have several choices about how to proceed. They might export products from factories at home. But if the foreign market gets big enough, local competitors would quickly appear. Or, an investment might be made in an existing factory in the other country. This would be especially attractive if tariffs limited exports or if competition in the other country could be expected to come quite early. Finally, a new factory could be constructed in the other country. This factory would be controlled from the home country. Again, however, if the product turned out to be successful, local competition would be expected.

If competition appears, management control of the investment may not be useful from a profit viewpoint. Profits would be about as large if the firm simply invested as a noncontrolling stockholder in an existing company already making the product.

Thus, there are essentially two forms of foreign investment. The first is called "portfolio" investment. It involves investing funds in a foreign enterprise simply to earn a profit. No control is involved. The other form of investment involves control by the investing firm. It is called "direct" investment. Each form of investment should be equally profitable according to this theory. So you would expect neither form of investment to be more common than the other.

Foreign investment by companies has a number of advantages for the country in which the investment is made. Usually, but not always, new factories increase employment, promote economic growth and raise people's standard of living. Even where investment is made in an existing firm,

the investment increases the amount of new capital funds available to the country. It is the same as if domestic savings had increased. This is the case for both direct and portfolio investment. Also, outside firms often introduce new products that might not have been available otherwise. This widens the range of choice for consumers. Finally, by increasing competition, foreign investors tend to, lower prices in the markets in which they are active.

Incoming foreign investment increases the capital available to the recipient nation. For the investing country, the opposite effect would occur. Investment capital would decrease. This might make remaining funds more costly to borrow, reducing domestic investment. There are some positive effects to foreign investment, however. For example, products made overseas might be cheaper. When imported into the investing country, they might reduce prices. Also, capital used to manufacture these uncompetitive products can then be shifted to produce items which are more competitive. If foreign investment is made in order to develop new sources of energy and other raw materials, it may lower prices and conserve domestic reserves of these materials.

All in all, recipient countries should welcome foreign investment because it improves the economic welfare of their people. Although the situation for the investing country is less clear, there is a good chance that foreign investment can have a positive effect there as well.

THEORY II

THE OLIGOPOLY EXPLANATION

Business firms, according to the Oligopoly Explanation, are profit-maximizers. They invest abroad only because foreign investment opportunities appear able to make higher profits than other opportunities. But the Oligopoly Explanation holds that foreign investment is actually highly likely to lead to higher profits, especially for firms from countries like the United States.

The attractiveness of foreign investment according to this explanation lies in a complicated notion of the corporation's economic power. Firms are not seen as passive agents responding to market forces over which businessmen have little, if any, control. Instead, managers' actively influence and shape the economic environment. Businessmen are able to increase profits in ways which competitors cannot match, at least in the short run. And this competitive advantage is even more important when the company's managers decide to invest abroad.

The sources of these advantages are two-fold. First, many industry sectors are comprised of relatively few firms. Each of these firms enjoys a significant and measurable share of the market. Companies in each industry attempt to maintain or increase their market shares.

They do this through "differentiation." Each company attempts in one way or another to find or develop qualities not possessed by other firms. If a company succeeds in differentiating itself from competitors, then it achieves a certain amount of independence in setting prices. Thus it partly controls its own profitability. This form of market structure, in which large firms jockey for position, has been called "oligopoly."

Oligopoly does not imply the absence of any competition. Quite frequently, advantages generated by one company disappear over time. Other companies usually can duplicate the quality which has differentiated the first firm. But, the effort can take a substantial period of time. During this time the innovating firm can be developing other advantages.

The second source of these competitive advantages has to do with the manner in which business firms develop unique qualities. Most obvious, perhaps, are differences due to technological information. Companies, through research and development, produce items or provide services technically superior to their closest competitors. Firms in the same industry develop products with somewhat different features. Thus the firms become differentiated in their ability to satisfy consumer needs.

There are other ways for differentiation to occur. Some companies develop unique management skills. These skills are particularly valuable when the firm chooses to move operations to a foreign country in which the advantage may be even greater. Another advantage is access to low-cost capital. The United States is the most capital-rich nation in the world. So the cost of capital is often lower for U.S. firms than companies elsewhere. Another source of differentiation is consumer brand loyalty. Oligopolistic firms generate loyalty through persistent advertising. This has proven effective even where the actual products of various firms are quite similar. When the firm moves overseas, advanced advertising techniques can be transferred to the new environment. Both the soft drink and automobile industries provide examples of success through advertising.

Oligopolistic manufacturing firms invest in other countries mostly to generate profits higher than those available at home. Two important features of foreign investment follow. First, foreign investment should be most important for those industries dominated by relatively few firms. In fact, companies in more competitive industries would probably not invest at all.

Second, foreign investors, and particularly U.S. foreign investors, are likely to insist upon control when they go abroad. There are two forms of foreign investment. The first is "portfolio" investment. It involves investing funds in a foreign enterprise simply to earn a profit. No control is involved. The other form of investment involves control by the investing firm over management decisions. It is called "direct" investment. If monopolistic advantages motivate investment, then the investor will not wish to share the fruits of his advantage with local firms. So most foreign investment should be direct investment.

Investment receiving countries may be ambivalent about outside investors under these circumstances. On the one hand, investment does increase the supply of capital funds. This can increase employment and economic growth. On the other hand, however, the price paid for this new capital may appear too high. Additional profits must be paid because the company, with its competitive advantage, can charge higher prices. But if international trade is free, the MNCs (multinational corporations) could get these additional profits anyway by exporting goods to the country. So the choice for host countries might be between acquiring somewhat overpriced capital, along with new technology, or not receiving investment at all.

Sometimes, in order to get the capital, potential host countries will erect tariff barriers against imports. Typically, this increases domestic prices above world prices for the product. If the domestic market is large enough, production behind the tariff barrier might be more profitable than serving the market through exports. Investment is

therefore encouraged. Where this occurs, of course, consumers of the product pay even higher prices than if there was free trade. And foreign producers earn even higher profits. This might still be desirable if other benefits come from the investment.

The point is that when the foreign firm has a monopolistic advantage, profits can be quite high. It is thus possible that the receiving country could be worse off economically after the investment has occurred than it was beforehand.

THEORY III

THE EXCESS PROFIT OR MONOPOLY EXPLANATION

Some economic observers hold that foreign investment is a natural consequence of the growth and development of a system called "monopoly capitalism." They argue that this system is found in industrial countries, particularly in the United States. To understand the concept of "monopoly capitalism," it is necessary to trace briefly the theory's main thrust. Economists of this persuasion believe that the free enterprise, or capitalistic, system always leads to monopolization in most important industrial and commercial sectors. That is, over time, industries become dominated by a few very large firms. This process, in turn, leads to several consequences. First, increasing monopolization results in a markedly different market structure. Prices are not necessarily closely related to production costs. Firms try to differentiate their products in unimportant ways from those of competitors. And they try to persuade consumers that such frivolities are in their best interests. The outcome of such efforts is even greater industrial concentration and significant "excess" profits.

The tendency toward monopolization also distorts both income and wealth distribution. Larger and larger proportions of total national income accrue to a very small capitalist elite. This trend has its effect on the economy. "Surplus" income in the elite group increases the demand for luxury goods which do not contribute to overall social welfare. Domestic investment takes place largely to produce these worthless items.

Underinvestment characterizes the monopolized industries. Expansion in these industries would result in lower prices. This might benefit consumers, but it would reduce monopolistic profits. Instead, the surplus savings of the capitalist class are invested elsewhere. Among such places are the nonmonopolized industrial and commercial sectors. By investing in these industries, capitalists preserve the profits of their own sectors and, by eliminating competition, form new concentrated industries. Clearly, this process results in even higher levels of industrial concentration.

But more important is the tendency for the capitalist to be attracted to foreign markets. There are several reasons why overseas investment by the capitalist elite, represented by multinational firms, occurs. For example, in the continuing struggle among the remaining industrial giants, immense advantage can be gained by the firm that locates (and, if possible, corners) sources of cheap raw materials. In other cases, firms have the opportunity to use manufacturing and marketing techniques learned at home to their advantage in other countries. Eventually, the sequence of events observed at home begins to occur globally. Concentration of production and income becomes a worldwide process.

The reason why the capitalist elite invests abroad in the first place is to improve its own economic status. For this reason, every effort would be made by the capitalists to exploit host nations, as the home country was exploited earlier. As a matter of fact, some economists argue that the apparent advantages of capital investments are largely false. Any investment is quickly repaid through very high monopolistic profits. Thereafter the host country is simply bled for the benefit of foreign owners. Countries lose control of their economic destinies. They become pawns to outside monopoly interests.

Obviously, under these circumstances, nations would do well to limit the activities of multinational corporations. Existing foreign corporations should be nationalized (expropriated) without compensation. The facilities almost always will have been "paid for" by excess profits already paid out. It makes no sense for host countries to pay foreigners higher profits on investments which, at best, provide only slight benefits and, at worst, leave the country less well off than it was before.

GILLETTE WORLDWIDE STRATEGY TAKES PATIENCE

By Fred Bayles
Associated Press Writer

BOSTON - Gillette is trying to sell razor blades all around the world but in many lands the company first has to sell people on its ideas of shaving.

The competition to Gillette razors overseas ranges from pairs of coins used as tweezers to honed edges on broken soda bottles. The company is patiently spreading the word in less-developed nations that shaving can be more comfortable and easier than traditional methods of removing facial hair. And it also introduces the local equivalent to America's time-honored "Super Blue."

ONE OF GILLETTE'S more popular marketing devices in Africa and Asia is a giant shaving brush.

The brush is carried from village to village in vans equipped with wash basins, towels and razors. When the native hucksters who travel in the van attract a crowd, the big brush is produced and used to paste a volunteer with a faceful of shaving cream.

He is then shaved, and, in an atmosphere of great hilarity, other villagers are invited into the van to try their hand at lather and blade.

The Boston-based firm has been developing overseas markets since it first sold razor blades to the British 75 years ago. Today its international dividion sells toiletries in 22 countries and operates 29 foreign plants. The operation accounted for two-thirds of Gillette's $1.98 billion in sales last year.

Gillette is now in the Third World, laying the groundwork for what could be a thriving market when developing nations develop a need for razor blades and deodorant. To prepare, the company has built factories in Morocco, Malaysia and Indonesia. Another plant is being built in Egypt.

"WHEN WE TALK about potentials, you're talking about 25 years in the future." says Mills, who has travelled the globe for Gillette. "You're betting that many of these emerging high-population Asian and African nations will be the Brazil of the 21st Century."

One of those bets is Indonesia, the island nation whose population of 140 million is projected to hit 200 million in the next decade, creating a market comparable in size to the United States.

Gillette built a blade factory outside Jakarta (Indonesia), seven years ago - a small plant by U.S. standards but with room for expansion. Like operations in other countries, the plant is owned jointly with a local businessman to comply with Indonesian laws restricting foreign businesses.

TO SELL ITS blades, which carry the Indonesian trademark "Goal" Gillette must sell the idea of shaving - no easy feat in lands where men tweeze out facial hair with coins or shave with a double-edged blade held between the fingers.

In Indonesia, billboards and store posters sell blades with advertising techniques out of the 1930's. Quality and economy are stressed, but the blades are also portrayed as keys to romance and success.

"WE TRY TO SELL the shaving habit and a factor of social consciousness," says Mills. "We have ads showing the clean-shaven man getting the good job or winning the girl."

The blade sold in Indonesia is similar to the Gillette Blue marketed in the United States nearly 20 years ago. More sophisticated razors, like Gillette's Trac II, are too expensive and too specialized for countries where a razor blade has other uses. Trac II may offer a superior shave, says Mills, but it makes a lousy pencil sharpener.

"You can't rely on current U.S. Products," he says. "They're light years away from what is needed in some countries."

ANNOTATED BIBLIOGRAPHY FOR INSTRUCTORS

Barnet, Richard J. and Ronald E. Muller, Global Reach: The Power of the Multinational Corporations, New York: Simon and Schuster, 1975.

This book, written by two Americans, is perhaps best described as a recent work in a muchraking tradition. It includes extensive data and selective documentation, but is lively and highly readable.

Kindleberger, Charles P., American Business Abroad: Six Lectures on Direct Investment, New Haven: Yale University Press, 1969.

This book is an outgrowth of a series of invited lectures the author presented in New Zealand. Like Vernon (below), Kindleberger is an authority on international economics and business. The lectures are well organized and provocative.

Magdoff, Harry, The Age of Imperialism: The Economics of U.S. Foreign Policy, , New York: Monthly Review Press, 1969.

Magdoff, as the title of his book implies, takes a radically different approach to the analysis of U.S. overseas investment. His viewpoint, it is fair to say, is receiving increasing attention, as Barnet and Muller's (above) book demonstrates. Magdoff includes extensive data, presented clearly and understandably.

Servan-Schreiber, Jean-Jacques, The American Challenge, New York: Atheneum House, 1968.

This book gives a European view of the appropriate response to American competition on the Continent. It received wide acclaim and distribution, both in France and the United States.

Vernon, Raymond, Sovereignty at Bay: The Multinational Spread of U.S. Enterprises, New York: Basic Books, 1971.

Vernon is a leading scholar on multinational corporation studies. This book is the first of a series emanating from a large Harvard University study of such companies. It also includes data and tables from the study. This book, nonetheless, is very readable.

VOCABULARY LIST FOR INSTRUCTORS

Corporate Managers: Persons who own or work for others (i.e., stockholders) in a leadership capacity within a corporation.

Portfolio Investment: Ownership of the assets of a corporation, for the purpose of obtaining income from profits, which does not involve management control over the corporation.

Direct Investment: Ownership of the assets of a corporation which gives the owner some influence or control over the management of the corporation. (Usually ownership of 10% or more of outstanding stock is required for an investment to be considered a direct investment).

Oligopoly: A type of market structure in which large firms control the majority of sales and jockey to keep or enlarge their market shares largely through differentiation rather than pricing.

Monopoly Capitalism: A type of market structure in which large firms or a single large firm controls a particular industry and thus has virtually complete freedom from market constraints in setting prices.

Private Foreign Investment: Acquisition of real or financial assets in one country by nongovernmental organizations or individuals in another country. The assets can be either corporate or governmental securities.

Differentiation: The process of creating, through advertising or technological means, an image that a company's products are unlike or substantially better than those of possible competitors. The purpose is to minimize competition between essentially similar but differentiated products.

ECONOMICS

INVESTING ABROAD: A SIMULATION OF NEGOTIATIONS BETWEEN MULTINATIONAL CORPORATIONS AND GOVERNMENTS

DURATION: Approximately four class periods.

PURPOSE: To make the students aware of differing views of the benefits of foreign investment for less developed countries.

To provide the students with an understanding of the process and trade-offs involved in negotiating foreign investment contracts.

OBJECTIVES: The students will:

(1) identify two views of the impact of foreign investment on less developed countries;

(2) make decisions as to the acceptability of an investment contract from one or the other of these viewpoints; and

(3) analyze the reasoning behind these decisions.

BACKGROUND INFORMATION FOR TEACHERS:

As noted in the Background Information for the previous lesson "Why Business Firms Invest Abroad," foreign investment has become a critical part of the global economy. American multinationals number well over three thousand. They own over 200 billion dollars worth of assets in over 23,000 foreign corporations. American multinationals alone have worldwide sales of over 2 trillion dollars.

Perhaps because of the enormous wealth and resources of multinational corporations, relations between them and governments are not always smooth. Increasingly in fact, governments of Third World Nations, even those led by moderates or conservatives, have seen fit to exercise greater control over multinationals which operate in their countries. These policies are highly related to their views of the world market, the power of the multinationals, and assumptions about the impact of multinationals on host countries.

Two Perspectives on Investment

Most corporate managers would argue that the benefits of foreign invest[illegible] to the host country, including less developed countries, are great. [illegible]stment in new enterprises increases employment. Investment of any [illegible]akes additional capital available to a country: capital gene[illegible] [illegible]eople and businesses in other countries. Perhaps most important [illegible]vestment brings new technologies, new management skills and other [illegible]ngible resources which will help the host country to compete in [illegible]orld economy in the future.

On the other hand, most government leaders in less developed countries view foreign investment somewhat more skeptically. Some view foreign investment with hostility. They argue that foreign investors seldom create enough new jobs to off-set jobs lost as local competitors are forced out of business by the larger and more competitive multinationals. Further, while multinationals have access to capital outside the country, many tend to raise needed capital inside the host country. So they actually tie up local capital that would otherwise be available to local entrepreneurs. Finally, many multinationals are criticised for importing inappropriate technologies (e.g., capital intensive rather than labor intensive) or antiquated technologies. They also usually bring in foreign managers and skilled workers, and may do little to train local people for these jobs.

Theories of Investment

These views conform generally to the theories of foreign investment outlined in the previous lesson ("Why Business Firms Invest Abroad"). Corporate managers typically represent a simple profit or an oligopoly viewpoint. They believe in the benefits of private foreign investment. But they also believe that management makes a big difference in the success of an enterprise. So they prefer to control their investments as much as possible. Government leaders in less developed countries tend to hold views somewhere between the oligopoly and monopoly capitalist approaches. They usually believe foreign investment can be useful, but only under certain conditions and only if the government can keep a close eye on the investors.

Student Learning

This lesson can be used as a follow-up to the previous lesson "Why Business Firms Invest Abroad," or an an independent exercise. As a follow-up lesson it reinforces basic concepts about the impact of foreign investment on other countries, particularly less developed ones. It also gives students an opportunity to identify and use the differing theories of foreign investment they have learned.

The lesson can also be used to introduce students to foreign investment. It provides a less rigorous but potentially useful introduction to foreign investment than the previous lesson. Students perceive the differing attitudes of corporate managers and government leaders toward foreign investment. They use these viewpoints in simulated negotiating and decision-making situations. Introductory briefings and the suggested debriefing help students to see why firms want to invest abroad, why many Third World governments are skeptical of foreign investment, and what impact these differing perceptions have on relationships between the two.

<u>MATERIALS</u>: "Simulation Scenario," "Role Assignments," and four sets of Negotiating Instructions.

INVESTING ABROAD

VOCABULARY: Foreign investment, capital, technologies, multinational corporation, infrastructure, tariffs, contract, negotiations, majority control, minority interest, concession/compromise, skilled position, managerial position, personnel.

INSTRUCTIONAL STRATEGIES:

DAY 1: OPENING THE LESSON

Step 1: Introduce the lesson by discussing the differing perspectives which firms and governments in many less developed countries have of the benefits of foreign investment.

The discussion can be based on material from the Background Information for this lesson and from material in the previous lesson "Why Business Firms Invest Abroad."

If you have used the previous lesson, you will want to review differing positions on the impact of foreign investments with the class. Then ask which views corporate managers are more likely to hold and which views government leaders in less developed countries are more likely to hold.

DEVELOPING THE LESSON

Step 2: Introduce the simulation by explaining to students that they will be simulating a negotiation between two multinational corporations and two hypothetical Latin American countries.

Read the Simulation Scenario, or project a transparency of it for the class to read.

Step 3: Divide the class into the four negotiating groups. You can record role assignments on the attached Role Assignment sheet.

The groups should be arranged in the following manner.

(Front of the Classroom)

Government of Parazuela

Worldwide Pipes

InterCo Resources

Government of Salubal

(Back of Classroom)

Assign one student in each group to serve as Director or Minister. This person plays a key role but will not participate directly in the negotiations. The other members of each group will form two negotiating teams. The Government of Salubal, for example, will have a Minister, one team to negotiate with representatives from InterCo Resources, Inc., and one team to negotiate with representatives from Worldwide Pipes, Ltd.

Step 4: Hand out the appropriate Negotiating Instructions to each group. Tell the groups to keep their instructions secret, otherwise they will be at a disadvantage in the negotiations.

Have the groups spend the rest of the period discussing their strategy for the negotiations. Circulate among the groups to make certain they understand their objectives and their fall-back positions.

DAY 2

Step 5: Give the groups a few minutes to settle or review their negotiating strategies.

Step 6: Convene the negotiating sessions by having teams assemble half way between their two groups. If possible negotiating teams should face each other across a table.

All four negotiations should proceed simultaneously.

The Ministers and Directors should not participate directly in the negotiations. But their subordinates should keep them advised of progress within the negotiating session through written messages. The Directors and Ministers may make suggestions or approve compromises by passing written messages back to the negotiating teams.

Allow about 30 minutes for the negotiating sessions.

Step 7: End the first round of negotiations. During the rest of the class the four groups should discuss where the negotiations stand. The negotiating teams should report on any tentative contract terms they have been able to finalize.

Step 8: At the end of the period, the four Ministers and Directors must choose, on the basis of their instructions and the advice of their negotiators, to accept or reject the tentative contracts negotiated thus far.

Corporate Directors can accept only one agreement. Government Ministers can accept either or both agreements if they so wish.

The simulation is concluded if any contract is agreed to by both parties. If no contract is agreed to, the simulation continues for a second round.

DAY 3:

Step 9: If necessary conduct a second round of the simulation by having the class repeat Steps 5 through 8. That is, they should.

(a) Spend 5-10 minutes discussing their negotiating strategy within the larger groups;

(b) Reconvene negotiating sessions, spending no more than 20 minutes trying to hammer out final terms of a tentative contract;

(c) Discuss these tentative contracts in the larger groups for a final 5-10 minutes;

(d) Announce a decision as to whether they accept or reject the tentative contracts. Again, Corporate Directors can accept only one contract. Government Ministers can accept either or both. Neither party need accept any contract if they still have not reached acceptable terms.

DAY 4: CONCLUDING THE LESSON

Step 10: Conclude the simulation after Round 2 whether a contract has been agreed to or not.

Discuss the simulation with the class. You might use the following as a guide:

1. Compare the viewpoints of the two governments toward foreign investment generally. Both are skeptical, but one is more against foreign investment than the other. "Why?"

2. If you have completed the previous lesson "Why Business Firms Invest Abroad," which of the three theories of foreign investment do these governments appear to hold? What about the two business firms?

3. Compare the negotiating instructions for the two governments, especially their fall-back positions. How do these instructions reflect the viewpoints of the two governments?

4. How did the negotiating instructions affect the outcome of the simulation? Who got the contracts and why?

5. How do the viewpoints of the multinational corporations differ from those of the governments? Are there differences between the multinationals?

6. Were the multinationals able to use the competition between the two governments to get extra concessions?

7. This competition between governments is common in the world economy. Corporations have often used it to great advantage. What might the governments do to reduce this advantage in the future?

SIMULATION SCENARIO

Parazuela and Salubal are neighboring countries on the South American continent. Both countries are experiencing problems common to developing countries. They have high unemployment and high inflation. They do not have sufficient capital to develop their natural resources. They have inadequate infrastructure (e.g., transportation system) to attract foreign investment. They have limited means of controlling those foreign companies they do attract. They lack skilled managers and technicians, and so on. Parazuela is currently governed by a left-wing coalition government of labor and intellectual groups. Salubal is governed by a centrist political party which has been in power for the last twenty years.

Both countries are members of LAFTA, the Latin American Free Trade Area. They are considered attractive places for investment for three reasons. First, businesses in these countries can sell their products throughout Latin America at reduced tariff rates. Second, both countries, but Parazuela in particular, have many natural resources. Third, both countries have had relatively stable political histories.

Two companies, Interco Resources, Inc. and Worldwide Pipes Ltd., are interested in building factories in one of the two countries. The companies make a different line of products and thus do not compete head-on. Both need government permission to build their factories. They have been negotiating with the two governments for some time. Final terms for tentative contracts have been reached on most points with both governments. But the companies can build only one factory each. So they will have to choose between the two countries in the end. This can be used to their advantage in the negotiations.

The governments of both Parazuela and Salubal are very interested in getting the factories for their country. The factories themselves will help unemployment. And both companies have indicated in negotiations that they will invest additional money to develop local resources. This will both increase employment and provide a basis for a new export industry.

SIMULATION ROLE ASSIGNMENTS

Role Assignments: Government Representatives

	Government of Parazuela	Government of Salubal
Ministers:	__________	__________
Deputy Ministers: (Heads of teams negotiation with InterCo.)	__________	__________
Deputy Ministers: (Heads of teams negotiating with Worldwide)	__________	__________
Members of First Negotiating Teams: (InterCo)	__________	__________
	__________	__________
Members of Second Negotiating Teams: (Worldwide)	__________	__________
	__________	__________

Role Assignments: Corporate Representatives

	InterCo. Resources	Worldwide Pipes
Directors:	__________	__________
Deputy Directors: (Heads of teams negotiating with Parazuela)	__________	__________
Deputy Directors: (Heads of teams negotiating with Salubal)	__________	__________
Members of First Negotiating Team: (Parazuela	__________	__________
	__________	__________
Members of Second Negotiating Team: (Salubal)	__________	__________
	__________	__________

NEGOTIATING TEAM INSTRUCTIONS -- GOVERNMENT OF PARAZUELA

You are members of the Ministry of Economic Development. One of you will serve as the Minister. He or she will not participate in the negotiations directly. But the Minister will make final decisions to accept or reject tentative contracts.

The Ministry of Economic Development is responsible for solving your country's domestic economic problems. These include unemployment especially. One key to solving this problem is the development of your natural resources. However, your country has neither the technical skill or the capital required to do this.

Foreign investors do have the skill and capital. Yet, in general, you are skeptical of foreign investors, particularly large corporations such as Worldwide and InterCo. You see them as potentially dangerous. They have capital, technology and skills. But you believe you must control foreign investors closely to make sure your country actually benefits from the investment. You would strongly prefer that foreign investors not get total or even majority control over local companies.

You have been negotiating with InterCo and Worldwide for some time. The general terms of an agreement between you and both companies have been developed. Only three points of disagreement remain with each. First, will the company help develop your natural resources, and who will own control of those investments? Second, will the company train and hire local people, or will it be free to bring in foreigners for skilled and managerial jobs? Third, will the contract be reviewed from time to time, and when?

You have come up with a list of objectives which apply to your negotiations with <u>both</u> companies. These are the terms you want to get. You have also, however, come up with a list of fall-back positions. These are terms you would be willing to accept <u>if necessary</u>. Discuss these objectives and fall-back positions and make certain you understand them before going into the negotiations. Remember, you can agree to contracts with either company, or both. You can reject both contracts. <u>But</u>, you are competing with Salubal for these factories. If you compromise too much, you strongly believe your country will be exploited by these companies. On the other hand, if you do not compromise at all, you may lose the investments to Salubal.

A. <u>Objectives</u>

1. Natural Resources - your country to retain complete control of natural resources, with the capital and personnel supplied by the foreign investor.

II Personnel - within five years, 95% of employees to be nationals.

III Contract Review - at your option, the contract may be brought up for renegotiation at any time.

B. You have decided that the following concessions may be made if necessary:

I You will agree to something less than total local control, but not less than 50/50 joint control.

II Personnel - Extension of deadline for achieving 95% local staffing up to fifteen years.

III Contract Review - No concession here.

NEGOTIATING TEAM INSTRUCTIONS -- GOVERNMENT OF SALUBAL

You are members of the Ministry of Economic Development. One of you will serve as the Minister. He or she will not participate in the negotiations directly. But the Minister will make the final decision to accept or reject tentative contracts.

The Ministry of Economic Development is responsible for solving your country's domestic economic problems. These include unemployment especially. One key to solving this problem is developing your natural resources. However, your country has neither the technical skill nor the capital required to do this.

Foreign investors such as InterCo and Worldwide do have the resources and skills needed to reach this goal. You are not against foreign investors. But you do agree that business firms generally, and large ones in particular, need to be watched. Thus, you are not against foreign control over the resources. But you do want the right to review the contract at will in order to keep the company honest. What is critical to you is the employment and training of local people.

You have been negotiating with InterCo and Worldwide for some time. The general terms of an agreement between you and both companies have been developed. Only three points of disagreement remain with each. First, will the company help develop your natural resources, and who will control those investments? Second, will the company train and hire local people, or will it be free to bring in foreigners for skilled and managerial jobs? Third, will the contract be reviewed from time to time, and when?

You have come up with a list of objectives which apply to your negotiations with <u>both</u> companies. These are the terms you want to get. You have also, however, come up with a list of fall-back positions. These are terms you would be willing to accept <u>if necessary</u>. Discuss these objectives and fall-back positions and make certain you understand them before going into the negotiations. Remember, you can agree to contracts with either company, or both. You can reject both contracts. But, you are competing with Parazuela for these factories. If you fail to compromise, you may lose them both!

A. Objectives

1 Natural Resources - your country to retain majority control of natural resources, with the capital and personnel supplied by the foreign investor.

II Personnel - within five years, 95% of employees to be nationals.

III Contract Review - At your option, the contract may be brought up for renegotiation at any time.

B. <u>You have decided that the following concessions may be made if necessary</u>:

I You will agree to majority foreign control, but not to total foreign control.

II Personnel - Extension of deadline for achieving 95% local staffing up to ten years.

III Contract Review - Contract may be brought up for renegotiation at your option, anytime after 10 years.

NEGOTIATING TEAM INSTRUCTIONS -- INTERCO RESOURCES, INC.

You are members of Foreign Investment Division of InterCo Resources, Inc. One of you will serve as the Director. This person will not participate in the negotiations directly. But the Director will make the final decision as to which contract to accept, if any.

Your company has been exporting into the Latin American market for some time. But because of the import duties, you are now seeking a contract to build a factory in the region. You expect that in return for a permit to building the factory, you will have to agree to aid the host government in developing its natural resources. You need a steady supply of natural resources for the future, so this is agreeable. The terms of your investment are still in question to some extent, however.

Many provisions of the contract have already been agreed upon. Only the following three points of disagreement remain. But they remain points of contention with both governments. First, how will ownership of the natural resource investments be broken up; will you be allowed to have total control, or at least majority ownership? Second, will you be free to hire anyone you wish for skilled and managerial jobs, or will you have to hire and train local people? Third, will this contract be open to renegotiation and if so under what conditions?

You have come up with a list of objectives which apply to your negotiations with both governments. These are the terms you want to get. You have also, however, come up with a list of fall-back positions. These are terms you would be willing to accept <u>if necessary</u>. Discuss these objectives and fall-back positions and make certain you understand them before going into the negotiations. Try to negotiate the best deal possible with both governments. Use the competition between them to get better terms. Then choose the contract which comes closest to meeting your objectives.

A. <u>Objectives</u>

i Natural Resources - you want at least 80% control of natural resources developed, as InterCo will be providing most of the capital and all of the technical staff needed.

ii Personnel - you need the freedom to employ individuals of whatever nationality in skilled positions.

iii Contract Review - contract to be reviewed only by agreement of both parties, for 20 years.

B. You have decided that the following concessions may be made if necessary:

I Natural Resources - Joint Control (50/50)

II Personnel - you will promise gradual replacement of non-Parazuelan employees, nothing more specific.

III Contract Review - unilateral review possible after 10 years.

NEGOTIATING TEAM INSTRUCTIONS - WORLDWIDE PIPES, LTD.

You are members of Foreign Investment Division of Worldwide Pipes, Ltd. One of you will serve as the Director. This person will not participate in the negotiations directly. But the Director will make the final decision as to which contract to accept, if any.

Your company has been exporting into the Latin American market for some time. But because of the import duties, you are now seeking a contract to build a factory in the region. You expect that in return for a permit to build the factory, you will have to agree to aid the host government in developing its natural resources. You need a steady supply of natural resources for the future, so this is agreeable. The terms of your investment are still in question to some extent, however.

Many provisions of the contract have been agreed upon. But the following three points of disagreement remain. They are points of contention with both governments. First, how will ownership of the natural resource investments be broken up; will you be allowed to have total control, or at least majority ownership? Second, will you be free to hire anyone you wish for skilled and managerial jobs, or will you have to hire and train local people? Third, will this contract be open to renegotiation, and if so under what conditions?

You have come up with a list of objectives which apply to your negotiations with both governments. These are the terms you want to get. You have also, however, come up with a list of fall-back positions. These are terms you would be willing to accept if necessary. Discuss these objectives and fall-back positions and make certain you understand them before going into the negotiations.

Try to negotiate the best deal possible with both governments. Use the competition between them to get better terms. Then choose the contract which comes closest to meeting your objectives.

A. Objectives

I Natural Resources - you want majority (at least 51%) control of natural resources developed. Worldwide will be providing most of the capital and all of the technical staff needed.

II Personnel - you need the freedom to employ individuals of whatever nationality in skilled positions.

III Contract Review - Contract to be reviewed only by agreement of both parties.

B. You have decided that the following concessions may be made if necessary.

I Natural Resources - You are willing to accept joint control (50/50).

II Personnel - you will promise replacement of foreign employees within 20 years.

III Contract Review - Unilateral review possible after 10 years.

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